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PRACTICAL MEDICATION,

OR

THE INVALID'S GUIDE:

WITH

Directions for the Treatment of Disease.

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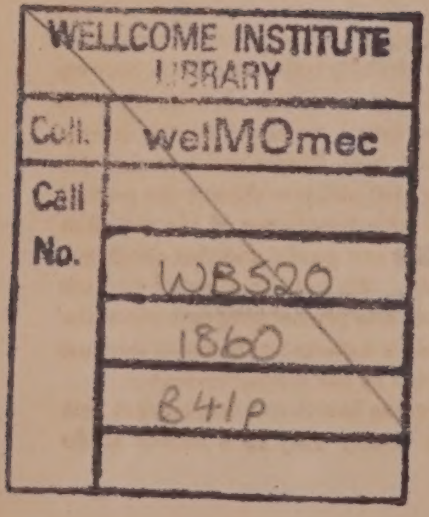

PREFACE.

The following work has been prepared with a view of meeting the frequently expressed wishes of many of the author's friends, that they might be furnished with practical directions for the use of water as a remedial agent. His object has been to make the prescriptions both plain and comprehensive, so that they may be used by almost any one, and in every form and stage of disease with a well founded confidence of successful results. The reader can not expect to find, in a small work of this kind, directions to meet every variety and phase of disease, but, the author believes that it is sufficiently practical, and that it will prove a blessing to every one who shall faithfully follow its instructions. Upon no subject is there more need of light and instruction than upon medical practice. It is true, that there are many medical books in the world, and many of these books are well written. But, they contain, for the most part, more of *theory* than *practice*, and are all much better adapted to the *physician* than to the *nurse*.

The author's design is to aid the nurse, to instruct fathers and mothers, to give such directions for the management of the sick, and for the preservation of health, that, in the absence of the physician, there shall be a confidence in the minds of the patient and nurse, that the course of treatment prescribed in this work is a rational one, and one well adapted to secure the end sought. He brings to the treatment of these subjects the experience of many years' extensive medical practice, and a careful observation in the use of water as the principal remedy in disease. He has been led to the conclusion now strongly impressed upon his own mind, and which must, if true, cause the hearts of many to rejoice, that the lives of multitudes of children, as well as of adults, might be saved by the timely application of a remedy, found in every household, both simple and rational. He believes, that it is not the design of the Creator that children should die prematurely; that sickness and premature death are the consequence of the violation of natural laws, which laws were designed only for our good; and that obedience to these laws will generally secure life and health. We hold that health and life are the natural results of obedience; that sickness and premature death show the violation of natural laws; *that medical treatment is a discipline to which we must submit in order to regain the harmony of health lost by our transgressions.*

We must, however, warn parents, and all who value health and life, against that fickle, spasmodic obedience, which does right to-day only as a license to do

wrong to-morrow, and that false idea, that, because they are doing many right and proper things for the preservation of health, they are therefore entitled to the blessing. We must insist upon a consistent and persistent course of right doing in order to secure the blessing sought.

Many will doubtless be ready to ask what have Scarlet Fever, Measles, Whooping-Cough and many other diseases incident to children, to do with transgression? Are they not the result of a contagious virus that is communicated from one to another? Could we prevent these forms of disease by rightly managing our children so as to secure any certainty of exemption from these attacks, or be sure to carry them safely through when suffering from them? In answer to these important inquiries, he would ask, Did it ever occur to you why these forms of disease were permitted to afflict children and through them the parents? Does the plague causeless come? Are not these diseases, at least, indirect results of violated law? Would they not cease to be terrors if children were brought up under proper habits of eating, drinking, clothing, bathing, &c.? He hopes to have made it plain, in the following work, that there is a way in which we may walk, even in this sin-cursed world, in which we shall find comparative exemption from sickness and premature death.

This work, however, is principally designed for the benefit of those who are suffering under some disease. Their enquiry is, how to obtain relief, and be most certainly and speedily restored to health. Many, from sad experience, have lost all confidence in the common practice of drug treatment, and feel as if it were better to trust entirely to the efforts of nature than to allow her recuperative powers to be destroyed or weakened by poisons or deleterious substances administered under the name of medicines.

The same want of confidence in the efficacy of the Infinitesimals of Hahnemann has justly affected the minds of many others; and, in most of the other systems of medical practice which so abound in our country, there is such a lack of simplicity and consistency in their theories of disease that they generally fail to satisfy the enlightened mind, either as to the truth of their theories or the efficiency of their medical applications. But, if we turn our minds to the art of healing as revealed in the laws of Hygiene and Water Cure treatment, we shall find a simple *theory of disease*, and, what is much more important and beautiful, a *simple, rational mode of medical practice* adapted to every situation of life. And especially is it applicable in the family, where parents and nurses are often required to act the part of physicians in prescribing for the firstattacks of disease; and often, in the absence of the physician of their choice, or in simple forms of disease, they must bear the whole responsibility of the treatment. In such cases and to such persons the following work, it is hoped and believed, will prove a valuable and safe guide and assistant.

PART FIRST.

CHAPTER I.

ANATOMY AND PHYSIOLOGY.

The design of this work contemplates nothing more than a mere outline of Anatomy and Physiology, so far as to give a practical illustration of these subjects. Those who desire to obtain a critical and scientific knowledge, are referred to Dr. Lambert's Anatomy and Physiology, or Dr. Cutter's, designed for schools, also to Dunglison's, or Carpenter's, wherein these subjects are treated in a clear and scientific manner, designed for medical students and the scientific medical practitioner.

The growth and symmetrical development of the human body, must necessarily depend upon food, drinks, air, exercise, dress, and the electrical or barometrical condition of the atmosphere, and also in a measure upon the social and civil conditions in which individuals are placed.

BONES.—The bones are the frame work of the body. There are about 244, which are so arranged as to be perfectly adapted to the wants of the body. The muscles are so attached to these bones that they form levers to give motion. The large bones are formed hollow and enlarged at the ends, to give greater surface for the attachment of the muscles, and still to preserve as light a condition of the body

as is consistent with the power to be secured and used. The element of lime enters largely into the formation of the bones, and is very essential to their strength and power of endurance. This lime is furnished from the food we eat and the water we drink. It is very important that those who have the charge of preparing food for the wants of this complicated machinery, the human body, should have some understanding of the essential elements of those articles which are used for food to secure the proper elements for nutrition. It is generally conceded that wheat contains more lime than any article of food; and also that there is more in the bran than in the superfine flour. It seems to be essential that wheat should form a large part of our food, especially because the bones form a large part of the body. The wheat with the bran ground together and unbolted is the most wholesome food for man, and almost absolutely necessary to secure growth, strength and health in the young. Other articles, as rye, oats, beans, peas, potatoes and similar ones, contain lime, but not in sufficient quantity to secure the best and most vigorous development.

To secure the growth and strength of the bones lime should be furnished in sufficient quantities, either in our food or drink. The diseases to which the bones are most liable, are those of hardening or softening. This condition must depend very much upon the quality of the food that is used. Rickets, a very common disease among children, in which the bones are too soft, is generally the result of improper nourishment. The hardening of the bones, which is more common in old people, is from the same source. In the one case there is too little lime, and in the other too much. So we see that while children are furnished with food unsuitable to their age, old people labor under similar difficulties. We hope to see a judicious and wise arrangement of

our culinary departments, in reference to the proper development and strength of the bones.

MUSCLES.—Muscles are the ropes or cords by which the body is moved. There are about twice as many muscles as bones. They are of various shapes and for various uses. No motion is performed without the use of the muscles. These can be so developed and trained as to be able to perform the most astonishing feats of agility and strength. As an instance of the rapidity with which the muscles can be trained to move, we refer to the human tongue in speaking, where there are hundreds of distinct motions made, in pronouncing one short sentence; very much of this agility depends upon training, as the pianist will testify while he moves his fingers with lightning-like velocity over the board. The strength or power of the muscles is perfectly astonishing to those who have not considered the matter. Dr. Winship of Boston is now surprising the public by feats of strength which he performs. He is a slender man, weighing about one hundred and fifty pounds, and yet he is able to lift from the ground nearly or quite twelve hundred pounds. He is also able to take a barrel of flour from the ground and put it on his shoulder. All this power he assumes to have attained, by proper and systematic training. Like the bones, the muscles depend upon food and drink for their growth and strength. In vain shall we look for a full developed muscle unless the food contains the elements for that development. We must have albumen, gelatin, gluten, and other substances to form good muscle. When treating upon the subject of diet we shall make some further remarks as to the quality of food necessary for good muscle.

NERVES.—These are the telegraphic wires, used by the mind, to send forth its mandates, or receive its messages. They are distributed to every part of the body, and no point can be touched, even with a

cambric needle, without giving some sensation. All this net-work of nerves is connected with the brain, from which alone they receive their life and power. The color is of a greyish white. The elements of which they are composed are peculiar. These elements are found in the articles of food which are used to form bone and muscle. But one peculiar element, which is phosphorus, is used but little in the formation of the muscles, and yet enters largely into the composition of the nerves. Children should frequently be furnished with articles of food, such as beans, peas, oat meal, &c., to give them good material for nervous development. A weak condition of the nerves is a great evil. Strong nerves can be secured only by proper food, right exercise and good habits.

Blood Vessels and other Vessels.—The blood vessels are used for circulating the blood to and from the heart. They are called arteries and veins. The arteries circulate the blood from the heart, while the veins return it. The heart is the great center and power of circulation. The wisdom, goodness, and power of the beneficent Creator are wonderfully displayed in this complicated apparatus; the more we know of it, the more wonder it excites. There is in an ordinary sized man about three gallons of blood. This large quantity is propelled through the heart lungs, and to every part of the body in about three minutes' time. All this is done without any consciousness on the part of the individual when in a state of health. The heart pulsates about seventy times per minute and propels from one to two ounces of blood through itself at each pulsation. The lymphatic lacteals and capillary vessels carry their respective fluids and mingle them with the blood. These fluids are all formed chiefly from the food and drink taken into the stomach. The fluids must necessarily partake of the nature and character of

the food and drink; if the aliments are of a highly stimulating quality the fluids of the body partake of the same.

GLANDS.—These are important organs in the system; and upon the proper performance of their functions depends, in a great measure, the health of the individual. No part of the body is more liable to become diseased than the glands. Indeed we might almost doubt whether any part would be seriously affected so long as they remain sound. The largest gland of the body is the liver. Its office is to secrete bile. The bile performs an important part in digestion. Just what that part is, no physiologist has ever yet been able to determine. Many forms of disease originate from the liver. The mesenteric glands, situated among the intestines, through which the chyle passes from the intestines to the lymphatic and thoracic ducts leading to the heart, are important organs, but their precise functions are obscure.

There are also lymphatic, salivary, renal and other glands in the body, to all of which important functions belong, and of which a full and particular knowledge is necessary only to the physician; and to him even, very many parts of this complicated machinery, in its normal or abnormal workings, are more or less of a mystery.

THE SKIN.—The skin is the covering of the body, and has much more to do with health than most people imagine, or are willing to admit. It is of a porous nature, and when in a healthy state the gases and fluids of the body pass freely through it. But when its pores are obstructed these fluids or gases are retained in the system producing a diseased condition of the internal organs. It is estimated that about five-eighths of what we eat and drink is passed out of the body in the form of insensible perspiration; such being the case it can be easily seen and understood why health depends so

much upon the proper action of the skin. The care it requires, is proper cleanliness, due exposure, and suitable clothing for protection.

Lungs.—These are important and vital organs, situated in the cavity of the chest, and with the heart fill the whole cavity. Their office is to vitalize the blood by extracting oxygen from the air and introducing it into the blood; also taking from it the carbonic acid gas which is generated in the production of animal heat. The lungs are very liable to become diseased, and being of a spongy texture they may easily become congested. From thence follow inflammations, tubercular deposits, ulcerations, consumption, &c. The importance of good air, proper food, and right exercise, can be justly and strenuously enforced from their influence upon the lungs. The pipes leading to the lungs through which the air passes, are called the trachea and bronchia.

The trachea leads from the back part of the mouth and nose down to the point where the pipe divides. From thence the continuation is called the bronchia. Through these tubes pass the air into every cell in the lungs. They are the seat of the disease called bronchitis, which signifies inflammation of the bronchia. Strictly speaking, it should be confined to the lower tubes, but as the disease is all one and the same thing, and requires a similar treatment to cure it, these nice distinctions are unnecessary and are not usually observed in medical practice.

CHAPTER II.

DIET.

Much has been said and written, by many reformers, on this, as it might be called, hackneyed subject. Diverse, and not unfrequently conflicting arguments have been presented in favor of an abstemious diet, a generous diet, a meat, or mixed, or vegetable diet. Very little has been said upon the necessities of the physical organization, and its chemical demands for food that should supply the chemical wants; and while they have said many valuable things in relation to the quantity and quality of the food, yet they have as often mistaken the real necessities of the body, and failed to adapt their prescription to the different temperaments and conditions. We hold that the temperaments and conditions have much to do in regulating both the quantity and quality of our food; and what would be meat to one of a certain temperament and in certain conditions, would be poison or innutritious to another of a different temperament, and under different circumstances; neither could there be any training that would make the two enjoy or thrive on the same diet. It is true, that persons by training, can make great changes in their natural appetites and temperaments, and this is an important fact, still the natural temperament will control, and we must in a certain measure conform ourselves to these natural conditions if we wish to secure health and happiness. In this work, we attempt to show the relation of food to the wants of the body in its different conditions and temperaments. The natural appetite is a sufficient monitor as to the necessity of food. Its mission there ends. In many

cases, the taste is somewhat of a guide as to the quality and quantity of food. If this taste were carefully cultivated, it might be a correct guide, but in an artificial state of society, where habits are early formed, the taste or instinct can not be relied upon with any degree of certainty. Children at a very early age learn the use of tobacco and ardent spirits, and their natural tastes become so perverted as to enjoy those noxious articles. But organic chemistry reveals to us the primary elements of the body, and shows at the same time the articles of food and drink best calculated to furnish to the body these original elements. Reason enters in to advise as to the best modes of preparing those elements, the quantities needed, the times of taking them, the changes to be made from infancy to childhood, from childhood to manhood, and from manhood to old age; also what we need in health and sickness, what in active or sedentary conditions, and what the different temperaments might reasonably be allowed to do.

The necessity of food is evident at once from the continued waste of the body. The quantity must of course be governed by this waste. If we take too much, we load the system with foreign substances that can not be appropriated to the wants of the body, and the individual becomes liable to acute attacks of disease to remove this excess, or it may form deposits in the body in the form of tubercles or tumors, which may result in serious chronic difficulties. Again, if a person who is in the habit of taking too much food resorts to artificial means, such as purgatives, to remove the excess, he weakens the digestive organs and shortens his natural term of life. Some people require more food than others from the fact that there is a greater waste in some than in others, even where their natural duties are the same. The same person would require more or

less of food as the habits were active or sedentary, or in a cold or warm climate. As to the quantity of food necessary to sustain the human body in the best condition, no one can judge definitely for another. It is not desirable to take too small a quantity. Most people err on the other hand, and take too much. Life can be maintained on a very small quantity of food. In case of scarcity, persons have been compelled to subsist upon from two to four ounces of solid food per day, and perform labor at the same time, for many weeks, in comparative health. The result of taking too little is loss of flesh, debility, and nervous prostration. While on the other hand, taking too much predisposes to acute diseases, such as fevers, dysenteries, apoplexies, dyspepsia, and nervous irritability. It is no doubt well for persons to have their feast days and their fasts, but three feasts should not be every day, as is often the case, neither should fasts be greatly prolonged except in cases of sickness.

The quality of food comes next in order for our consideration. We do not design to argue either for vegetable or animal food, as being best adapted for life or health, but we shall endeavor to argue and enforce a rational course of dietetics which both reason and chemistry will approve and sustain.

In the first place, then, the quality of food demanded must be such as shall nourish and build up the vital organism, and supply every part with those elements which the different parts may demand. If bread is required, give bread, and that quality, which shall meet the requirements; if meat, then provide meat, and of the kind which the system demands, and so through all the articles used for food, adapting everything in a wise manner to its use and the end to be served. We hold that the wants of the system are best met, in a large majority of human beings, by the articles of food

known as bread, meat, vegetables and fruits. In bread we include wheat, rye, corn, rice, buckwheat, oats, barley, beans and peas; in meat, beef, mutton, venison, poultry; in vegetables, potatoes, turnips, squash, beets, carrots, parsnips, cabbage, and such like articles; in fruits, apples, pears, peaches, melons, &c. In taking up the subject more particularly, we will state first the use of wheat. This grain is a production of the temperate zones, and is raised in great abundance through the northern, middle and western states in the United States; and also in the same latitudes in Europe and Asia. It contains all the elements of nutrition chemically in a better proportion to sustain the wants of the human organization, than any one other article of diet. It contains more lime for the bones, more gelatin, gluten and starch for the muscles, more phosphorus for the nerves, and more iron and sulphur for the use of the system, with the other elements, so that an individual can be nourished and sustained a longer time in better health on wheat, than upon any other one article of food. It should be used altogether; it is a great mistake to bolt it too closely in separating the bran and superfine flour. If the wheat is properly cleansed and ground without bolting, it makes more palatable bread, and will be preferred by a majority of people to the superfine flour bread. Also used in the form of cracked wheat or wheat mush, it is a very palatable and nourishing article of food. It is an excellent article for children, and for persons recovering from sickness, as well as for those who are leading sedentary lives or engaged in active mental pursuits. It is highly nourishing without being particularly stimulating. It gives the stomach enough to do to keep up its strength, and is not so hard to digest but that weak stomachs can digest it. We

regard wheat, in its various preparations, as standing at the head of the cereals as an article of food.

Next in nutritious properties is rye. This grain more nearly resembles wheat than any other of the cereals. It contains gluten and starch in large quantities, but does not contain as much lime. Silex is much more abundant in rye than in wheat, and is an important element to give hardness to the bone, or to form the enamel to the teeth. For the want of this element the teeth of the young are very tender and disposed to decay. Therefore rye, in the form of bread and mush, should constitute a part of the bill of fare in all our families.

Corn or Maize.—This is another cereal which forms an important article of diet in many parts of our country. It contains all the elements of nutrition, but not in as favorable proportions for health and strength as the wheat or rye. It contains more of iron and sulphur, and is therefore important for some weakly persons to use. It does well also for strong laboring men. It is highly stimulating and frequently causes heartburn in weak stomachs. In such cases it should be used only in small quantities. It should be used as an article of diet in all our families. It is not necessary or best that any of these articles should be used at every meal, but they should be alternated upon different meals, or days, or weeks, to suit the convenience of families. Corn meal can be mixed with either rye or wheat in making bread, and thereby make a good and wholesome article. In the form of cakes or mush it is very palatable and nourishing.

Rice is a grain which belongs more to southern, or warm climates, and seems there to hold about the same place that wheat does in a colder climate. It is a nourishing and wholesome article of food, less stimulating than wheat or corn. It answers well in a northern climate as a change

occasionally to be used in a state of health, or as an article of diet in sickness or convalescence. It seems well adapted to the young and to cases of weak digestion.

Buckwheat.—This belongs to a northern climate and may be taken in the fall and winter. It is too exciting and stimulating to be made a general article of food. Those persons who use it constantly through the winter will often suffer from debility in the spring. It is not safe to use this grain oftener than once in a day, or once in two days through the autumn and winter. Towards summer it should be entirely laid aside.

Beans and Peas are very similar in their nature, and contain a large percentage of nutrition. Some peculiar elements, such as phosphorus, render them very useful as an article of diet. They nourish the nervous system and give strength and power of endurance to those organs. They are not used for food in modern days as much as formerly. May it not be that the nervous debility and excitability of the present generation have been produced in some measure, at least, by unfortunate changes in regard to the use of food.

Oat Meal is a good article of food and contains elements of nutrition somewhat similar to beans and peas, and is useful for nervous people. The best preparations of oat meal are brought from Canada.

Meats.—Among these, beef, mutton, venison and poultry are the most important. Flesh meat is doubtless more easily digested than vegetable food. It has already passed through the process of digestion and is the product of vegetable substances. There is nothing in the nature of animal food that renders it unfit to nourish another animal. The arguments against its use are mostly of a moral character, and those whose moral sense is likely to be injured had better let it alone. There is food enough in the

vegetable world to give abundant nutrition to any one who chooses to live on a vegetable diet. Many persons had better not use animal food as diet. All the advantage there can be in flesh meat for diet is in its being more easily digested and more stimulating. In many cases of extreme debility this is important; but when the digestion is vigorous, the body will be soon satisfied with the amount of nutrition obtained from vegetables.

A passing remark should be made here upon the use of pork or swine's flesh as food. There have been many grave and serious objections urged by those who oppose the use of flesh meat as an article of diet, against the use of pork. In its native, or wild state, the hog does not seem to be very particular as to his choice of food, and as his own flesh must partake in a great measure of the nature of the food he consumes, so those who partake of the flesh of the swine must partake of the nature of the original elements. So the argument goes that various diseases originate from the use of swine's flesh, and especially that one so prevalent to this country, scrofula. The lean part of the swine, if fattened upon good and wholesome food, may not be particularly objectionable; the whole can be used more safely in the autumn and winter than in the spring and summer. We should much prefer the use of other kinds of animal food.

Fish, Eggs and Milk belong mostly to animal food, and are wholesome articles of diet in ordinary cases.

The proportion of animal food to that of vegetable is very important. As the result of a great variety of experiments as to the effects of an exclusive animal or vegetable diet, and a mixed one, it has been satisfactorily determined that about one-seventh or eighth part of our food may be flesh meat. As two pounds of solid food are allowed to

be the average quantity required by adult healthy people daily, four or five ounces of that amount may consist of animal food. If too much is taken, especially in warm climates, or in the warm seasons of the year, it predisposes the system to inflammatory diseases, fluxes, &c. May not the eating of so much animal food be an important cause of our summer and autumnal fevers?

VEGETABLES, such as potatoes, turnips, squash, &c., are all wholesome articles of food, but much less nutritious than the cereal grains or flesh. They should form a part of our daily food. They contain less earthy matter, and supply the system with fluids so essential to a plump and full developement of the muscles.

FRUITS, such as apples, pears, peaches, &c., are much less nutritious than the roots and vegetables, but perform as important a part in supplying the system with juices and should always be used as a part of our meals. It is injurious to use these articles as many do, continually stuffing them into the stomach, at irregular intervals, and at unreasonable hours. They should form a part of our daily meals, and especially if we are disposed to take a large quantity of food.

CONDIMENTS, such as salt, pepper, vinegar, mustard and the spices are used more for stimulants, and to give a relish to other articles of food, than for any nutritive properties they contain. They may be useful at times as a medicine, but it must be apparent to every one that it is not desirable to stimulate the stomach at all times to a high degree for the purpose of facilitating digestion. The stomach was made to digest food, and if furnished with plain simple articles, will perform the function of digestion in a much more satisfactory manner, without the condiments than with them. All such stimulants, if used constantly, have a tendency to wear out the

stomach and shorten life. They can doubtless be used at times to facilitate digestion without any particular injury. Salt in moderate quantities seems necessary, but too much is hurtful.

Sugar and Butter as condiments partake more of the nature of food. The use of these articles, in moderate quantities, can not be particularly objectionable; they do not furnish much of the material for making bone or muscle, yet they are used by the vital economy in sustaining respiration, or the calorific functions of the organism. The great evil in their use is in the quantity. This is emphatically true when given to the young. Children are seriously injured by the sweetmeats they are allowed to eat. Cakes and candies of various kinds, made rich, are pressed upon them by almost all persons who take any notice of them. They are pleasant to the taste and children not old enough to know or understand the evils, are tempted to partake of them, until the stomach is badly disordered and the fluids become acid, sordes form on the teeth, they become blackened, and soon decay. Superfine flour, sugar and butter in the form of loaf cakes, pound cakes, and such like articles should be used very sparingly by young people, and indeed by all who desire to enjoy health and long life. They can be used on special occasions as a luxury without injury, but when partaken as articles of daily food they cease to be a luxury and become absolutely injurious. Our food should be prepared to satisfy a healthy digestion, and not to pamper a depraved appetite.

Times of Taking Food.—The customs of the different nations vary. In some countries meals are taken four or five times a day, in others three times, in others twice, and with some individuals only once a day. There is only one point that seems to be important, and that is regularity or uniformity of habits. If one has acquired the habit of taking his

meals three times or four times a day, so let it be. But let him not be irregular eating largely one day and comparatively nothing the next day. We require a certain quantity of food, and when the stomach becomes accustomed to digest that quantity, provision is made for it and a habit is formed to that end. But if the stomach is to secrete a little gastric juice one day and a large quantity the next day, there will soon be derangement in the organ and disease will follow. Three meals a day seem to be the more common, and perhaps we should say, the most natural division of time in taking food. The habit of taking late suppers, or eating the heartiest meal just before retiring, or after the system has been exhausted with protracted labors, is seriously objectionable. Our heartiest meal should be in the early part of the day, or at farthest not much past the middle. Then the whole body is vigorous, and the stomach prepared to perform its functions in the very best and most satisfactory manner. Then also we have the benefit of our food in giving strength and force to the nerves. Not that our food is assimilated to the different organs the day we eat it, but its influence upon the nerves is direct. A man who is faint for the want of food, feels immediate invigoration after partaking, even long before it can have time to digest. If our food be taken regularly, eaten slowly masticated well, and withal taken in a cheerful and thankful spirit, we need have little fear of that too common disease, dyspepsia.

Different Temperaments.—That the different temperaments choose and require different varieties of food, is a matter of daily observation. This can be seen among children, brought up in the same families and subject to the same habits of diet. The bilious and lymphatic temperament will choose and require a large quantity of more stimulating food, while the nervous and sanguine will partake of a

smaller quantity, and of a quality less stimulating. These temperaments can be, in a measure changed and modified by the food they are allowed. If the nervous temperament is predominant or in excess, the food should be nourishing, but exciting condiments should be carefully avoided. Where the bil lious temperament is in excess the food should be less nourishing, consisting more of acid fruits and vegetables, and less of meat, rich gravies and cakes. Somewhat the same course ought to be pursued with the sanguine temperament. Spices must be avoided, and articles of food such as rich meats and gravies, which tend to increase the inflammatory action of the blood should be used sparingly. The lymphatic temperament may partake of food more stimulating, which would be calculated to develop the nerves and excite the system to more action. By these means a better circulation will be maintained and health and long life secured.

As might be inferred, the different temperaments are liable to different forms of disease. With the bilious, rheumatic diseases and difficulties of the liver will be more common; in the sanguine temperaments, fevers will be more prevalent. Nervous temperaments will develop more spinal disease, dyspepsia, and consumptions. The lymphatic will be more troubled with palsies, apoplexies, &c. But as the temperaments are all commingled, so we shall see the same commingling of different forms of disease. As wisdom is profitable to direct us in all things, so we advise every person to avoid extremes. Be simple in your habits of living; be cheerful and happy in your social relations; moderate in your enjoyments, and diligent in business, without excess of fatigue.

Active or Sedentary.—Food which is stimulating and nourishing is proper for those who are in active employment, while the same persons, if their habits

are changed, should correspondingly change their daily food.

Infancy.—The food of infants and young persons should be very carefully selected. No greater mistake is made than that of giving to young children food, that is fit only for active adult life. In many families it is very common to give young children that are just able to sit alone, pork, sausages, and other strong meats, which are altogether unfit for the delicate stomach of a child. Children that are freely fed with these rich articles of food, often exhibit a great amount of precocity. They are fleshy, active, and playful beyond their years. The parents and friends are well pleased with this mental activity and urge them still more and more to eat, furnishing them, at the same time, with the strongest kinds of food. The child thrives under the regimen pursued, till suddenly some acute attack of disease, cuts off as in a moment, all the fondly cherished hopes of the parents. They are stricken, and grieve over the dire calamity. They are consoled, perhaps even by their minister, declaring that God is a sovereign and that there is no searching out of his ways. They are exhorted to submission with the assurance that "God does all things well." And so he does. But of the great lesson God is endeavoring to teach them they have no knowledge. All their children die, and yet they are not instructed. The truth is, the course of feeding and treating the child, was such as would naturally bring about just such a result. The system was filled with those substances which would cause a high degree of inflammation or fever; and when some contagious disease like measles, or scarlet fever, is contracted, or some sudden atmospheric change disturbs the circulation, producing congestion of the lungs, or head, or causing croup, there is no power to resist, and death follows as surely as effect follows cause. If parents will

learn and obey God's laws, in the training of their children, they will be called to mourn their losses much less frequently. To the truth of this statement there are many parents who are ready to bear witness. Doubtless with all our care, in our present state of ignorance and sin, there will arise many cases of casualty which would deprive us of our children; but the number of distressing bereavements would be so much less, that we should have abundant reason to praise God for his mercies. As a general thing then, meat, or strong food should not be given to children until they are from seven to fourteen years old. Milk, fruit, and farinaceous food, are much better adapted to infancy and childhood.

YOUTH.—At the commencement of puberty, or in that change of life which develops the child into a man or woman, it is proper to furnish more rich and stimulating food. Nature puts forth all her powers to perfect the work which has been begun. Good nourishing food and systematic exercise are required to give a full and symmetrical development of the person. This is a very important period of time with the young. Parents and guardians should understand the dangers to which their children and wards are exposed. They should be well instructed. Parents commit a great error in trying to keep their children ignorant of the peculiar functions of their own bodies. The young *will* learn, and it is much safer for them to be well instructed by wise counsellors, than to obtain their knowledge from the vicious who have degraded themselves by their own corrupt habits. A hint to the wise should suffice.

MANHOOD.—At this period of life, if ever, the most nourishing food is to be used. Persons in active out-of-door exercise, are not very liable to be injured by any kinds of food, that are proper to

be used, provided they are partaken, under the restrictions that have been heretofore mentioned.

Old Age.—That period of life when the bodily vigor begins to decline, is a very important one. In men that period comes usually between 50 and 60 years of age; in women, usually between 45 and 55. There is no definite period; in some it occurs earlier and in others, later. But if persons who are active in business, understood the approach of that period, and would learn to accommodate themselves to that important change, it would save them a world of trouble, and serve to give them a vigorous and tranquil old age. There may be no particular inti mation of this change given by the feelings, yet, at a certain age it becomes evident that the individual is not capable of enduring as much fatigue, of performing as much labor, or of digesting as much food. If, under these circumstances, the individual should persist in performing the same amount of labor, or partaking of the same quantity and quality of food, after a time, some sudden attack of disease will prostrate him, or apoplexy or palsy will cut off, as in a moment, the brittle thread of life. If they linger on, it is only to drag out a miserable existence, a mere wreck of their former selves.

We advise persons when coming to that period of life, to carefully husband their strength; to abate somewhat of their business; to abstain from those stimulating articles of food used in the vigor of manhood and to choose a diet more bland and simple, returning again to the simplicity of childhood in their habits of life.

Seasons.—The changes of the seasons should have much to do with our habits of eating. It must be manifest to every person that the same qualities or quantities of food are not suitable for the different seasons of the year. In the fall and winter, we need a more stimulating and generous diet, than in

the spring and summer. We then advise, as a proper course to pursue, that people partake more freely of meats and rich food in the fall and winter; and of a more sparing and unstimulating diet in the spring and summer. Nature seems to have provided for these changes, both in the appetite and in the provisions made. In the fall, the appetite increases; the abundance of fruits and meats tempts the appetite, and the individual eats and gains in flesh and vigor. By this, he is better prepared to endure the cold of winter, and his physical system is better protected from colds and influenzas, than it would be if there was less vigor. But, as spring approaches, the appetite fails, and the individual loses in flesh and perhaps somewhat in vigor, until the hot season, when he is better prepared to endure the heat, and pass through the miasmatic season, with less danger, than if the system was full of blood. Acid fruits and drinks, and food that contains but little carbon, should be used in the spring and summer. Great mistakes are made on this point. Persons finding their appetite failing and not understanding the necessity of these changes, resort to stimulants, heating condiments, and bitters, to urge on the appetite. The result is, they keep up an artificial appetite and eat more than the system demands; and, when the miasmas of the summer and fall appear, they are affected with liver difficulties, dysenteries, or some other acute diseases, which are simply nature's means of removing the excess of carbon from the system. For, acute forms of disease are the efforts which nature makes to remove morbid matter. If her teachings were observed in relation to our food and drink, very seldom would these efforts be necessary. It may be proper also to hint at some mistakes that are made by persons, on the other hand, in the fall and winter; though this is seldom necessary, as most people are more inclined

to indulge their appetites, than to restrain them. But I have known some who had adopted a plan of eating by rule who would not vary that rule even though the voice of nature was ever so imperative. These will use the same kinds and quantities of food, winter and summer, regardless of the changes of temperature. We would say again that persons who wish to conform to nature's laws and teachings should use a more generous and stimulating diet in the fall and winter than in the spring and summer. Dyspeptics and those invalids who can not secure vigor of system by an increase of food must be careful about their exposure in the fall, winter and spring. The oxygen received by the lungs, and the carbon from food, must be somewhere nearly equal to secure health. If the stomach can not furnish sufficient carbon, and we are exposed to a cold air where there is a large quantity of oxygen, the result is, the oxygen acts on the mucous membrane, producing colds, catarrhs, coughs, and other difficulties of the mucous surfaces. Physicians often advise patients who have a predisposition to lung complaints to go to a warmer climate. They usually give no particular reasons for the advice. The object to be secured is simply to obtain a climate where there is less oxygen. If they understood how to increase the appetite, so as to furnish more carbon, it would be better to send their patients north than south. Many physicians have learned this by experience. Most persons, who have this predisposition to colds and coughs, have also a liver difficulty, which is not benefited by a southern climate. These persons, if they can be exposed long enough to a cold climate, lose that affection, their appetite increases, and in a little time they receive more carbon into the blood, and their coughs, colds and consumptive symptoms all disappear together. Whereas, a temporary visit to the south, only palli-

ates their diseases, and they return to suffer again in the same way, or to be subjected to form annual migratory habits like the birds. Judicious water cure treatment will usually bring the whole system into such a state of vigor as to fortify it against injury from atmospheric vicissitudes. Also, persons contemplating a distant journey should be instructed in relation to the changes of diet necessary under such circumstances. Persons, going from a northern to a southern climate, should make important changes in their food, even for some weeks before they start. Let a person go from the northern states to New Orleans in the warm season, and continue his habits of eating fat meat, rich gravies, butter, mustard, and cayenne; and drinking his champaigne, or perhaps stronger liquors, and the probability is that he will be stricken down almost immediately by some acute bilious attack; whereas, if he had pursued an abstemious course of diet, and subsisted mainly on acid fruits and vegetables, he could have endured this change of climate with little or no inconvenience to health. This interesting subject might be greatly enlarged upon, but enough has been said, if properly regarded, to save many persons from severe and lasting sickness, and perhaps from premature death.

Sickness.—It might seem, after what has been said, unnecessary to make any further remarks upon the subject of food in sickness. But there is one error so prevalent as to require at least a passing allusion. I mean the habit of urging persons who have an acute attack of disease to eat, and arranging a variety of tempting dishes to provoke their appetites. As a general rule, persons in acute attacks of disease had better abstain entirely from food for the first one or two days, or if any is taken it should be of the simplest kinds, such as water gruels or toasts. The appetite is usually a safe guide in acute forms of disease. Digestion is generally

nearly or entirely suspended. Under these circumstances if the stomach is loaded with food, however proper and wholesome it might be in a state of health, it becomes a foreign element to the system, increasing the nervous and physical disturbance, and must be expelled like other morbid matter. The drinking freely of hot or cold water will be found to answer a much better purpose for the wants of the stomach. In contagious diseases, like small pox and scarletina, a rigid abstinence from food is of the greatest utility. If individuals could anticipate their exposure and liability to these or other forms of contagious disease, and pursue a careful course of diet, avoiding salt, fat meats, butter and sugar, they would pass through the paroxysm with much less peril or suffering.

Influence of the Mind on Digestion.—Very few people are aware that indigestion, or dyspepsia, is produced by the mind almost as frequently as by the abuse of the stomach in the quality or quantity of our food. Nervous or mental dyspepsia is a very common difficulty. Our business is carried to our tables, and we resume our business or studies too soon after eating, and do not allow the vital forces to act with sufficient power, or to have sufficient time in the function of digestion. Many a poor hypochondriac is swallowing boxes of pills and bottles of bitters with a vain hope of securing a good digestion. Whereas, if he would simply allow the mind to rest, and relax the nervous system, he would have no trouble with digestion, and he might throw his physic to the dogs. It is a matter of astonishment to see men who have so much wisdom in commercial and financial affairs so ignorant in relation to the means to be used to preserve their health, while they will acknowledge that health, as stock in trade, is preëminently better than money.

CHAPTER III.

BEVERAGES.

USE AND NECESSITY OF FLUIDS.—About four-fifths of the whole weight of the human, and in fact of all animal bodies, is made up of water. The use of which is simply to prevent friction and thereby to secure the performance of all the functions of organic life. When the animal body is deprived of fluids, in a short time the natural functions of life begin to languish. The tongue becomes parched, digestion is retarded, the joints become stiff, the vision fails, hearing is impaired, the nerves become irritable, inflammation supervenes, delirium and death close the scene. All this will follow in a very few days. Cases are reported where persons have been known to live fifty days without food, but a person entirely deprived of water will not usually survive ten days. Pure water is all that nature demands as a beverage.

QUANTITY.—This, as with food, varies in different persons. The relative proportion, however, varies much more. The variation is very much greater in respect to drink than food. Neither is it of any great importance what quantity is taken. If too much is used it seems to be easily disposed of without serious tax upon any organ of the body. It is the office of the kidneys and skin to remove any excess of water from the body.

QUALITY.—Pure water is composed of oxygen and hydrogen in the ratio of one to eight. These two gases thus uniting form pure water. There may be various ingredients mingled in water, both of mineral and vegetable nature, none of which add essen-

tially to the virtue of the water as drink, and many of them are comparatively harmless. Among the most common minerals found in, or added, to water, to be used as a beverage, are lime, iron, sulphur, soda, and magnesia. These may be formed by nature or mingled by art.

Lime is the most common mineral found in water. Indeed nearly all our springs and wells contain more or less of this substance. Rain water seems to be generally free from it. The presence of lime does not seem to be injurious to the animal economy. As there is very much of lime required, nature evidently designed to furnish it in our drink as well as in our food. Some physicians have undertaken to show, that the presence of lime in the water used as drink, was the occasion of difficulties of the kidneys and urinary organs, as stone, gravel, &c. But statistics, that have been carefully prepared among people who have used hard and soft water, do not show that the lime is especially injurious. It can be taken in excess and no doubt prove injurious by causing the bones to become brittle and the muscles rigid. But gravel and disease of the kidneys do not seem to result necessarily from the use of hard water. The presence of other minerals found in water is generally confined to particular localities. There are numerous springs in various parts of the world which contain various minerals. These springs have more or less reputation as medicinal. No doubt they are so in many cases, as they contain the same elements as are found in the human body. These elements may be furnished to our bodies as well in drink as in our food. Waters that contain iron, sulphur, magnesia, or soda, are medicinal so far as they furnish these materials to the system when needed. But for individuals to partake of these minerals when they are not needed in the system, is an error which enlightened physiology would discard. The most

useful purgatives are found in waters which contain enough of magnesia and soda to act as a cathartic. Such are the Congress and Empire waters of Saratoga. They contain enough of saline and mineral elements to act as a brisk purgative, without producing any considerable prostration. Feeble persons can often use these waters to great advantage. Their virtue consists principally in removing morbid and acid matter from the stomach, liver and intestines. They should be used, like all other mineral waters, with discretion, under medical advice, adapting their use to the needs of the system. Soda, cream of tartar, and some other minerals are prepared as beverages in warm weather, and if taken in moderate quantities, are wholesome drinks.

VEGETABLES.—Among the many vegetable substances used as beverages, and prepared artificially, tea, coffee, chocolate, cocoa, and broma are the principal.

TEA, as a beverage, is in almost universal use. Scarcely a table in the civilized world that is not graced with a tea pot. There are several varieties of the tea plant, but they all contain nearly the same properties. The green tea is generally admitted to be the strongest kind, and the black tea the least objectionable. It is unnecessary to enter into a minute analysis of the effect of the tea upon the human system. It is a slight astringent and narcotic. Strong preparations of tea produce dizziness, tremors of the nerves, and weakness. A continued use of strong tea has a tendency to weaken the nerves, contract the stomach, injure digestion, causing palpitation of the heart, and a torpid condition of the liver. Young people are never benefited by the constant use of tea. Many are seriously injured. That it may act medicinally in some cases is very probable, but its constant use destroys its medicinal

effect. Persons of relaxed habits and old people may be benefited by its moderate use.

Coffee.—Scarcely less than tea has coffee found its way into every family throughout the land. No breakfast table is considered as fully set unless the hot java or mocha is furnished. There are not as many varieties of coffee as tea. It is less of an astringent but equally stimulating and narcotic. Its effect upon the nervous system is very similar to that of tea. It will disagree with more people than the latter. The objections to its use are very similar. If persons are using tea and coffee for the sake of the water in which they are prepared, they had better take the water without them. If they wish for warm or hot drinks with their meals, these can be furnished at less expense, and will answer the purpose equally well. There are no well grounded arguments in favor of the constant use of these stimulants, but there are many serious objections against their use, especially by the young. As little fluid as possible should be used with the meals. If persons are thirsty let them drink between meals. If the food is taken without much fluid it will generally be digested quicker and better. In some conditions of the stomach, where it is inflamed or contracted, a free use of simple fluids just before the meal, or even during it, may be advisable. The use of drinks with the meal is more from habit than from any necessity. The fluids of the mouth should moisten the food. It prepares it better for digestion.

Other Warm Drinks.—Chocolate, broma, shells, coffee made from rice, wheat, corn, oats, barley or crusts, are all nourishing, and partake of the nature of the articles of which they are made. In weak, delicate stomachs, food derived from these preparations is digested better perhaps than solid food. The principal objection to these articles is the filling up

the stomach with fluids to the exclusion of more nourishing food. Where nourishment is needed, we advise good solid, plain food. When drinks are required take them as simple and bland as possible. This is the best course in health. In a diseased condition we must be governed by the nature of the disease.

BEER, WINE, &C.—All fermented drinks, such as beer, wine, cider, ale, and porter, contain more or less of alcohol. Beer, ale, and porter, are prepared from hops, malt, &c. They are somewhat nourishing, but the alcohol renders them seriously objectionable. The hop is a good nervine, and simple hop tea is not ungrateful to the stomach and nerves. The barley of which malt is made is a nourishing article of food. In the process of fermentation these are so combined with the carbonic acid gas, as to give a very pleasant drink; were it not for the alcohol, there would be no injury resulting from their use. But alcohol, in any form, is not designed as a beverage. *Cider and wines*, are open to the same objections. The juice of the apple, and the juice of the grape, in an unfermented state, can not be injurious to a healthy stomach. But, when they have generated a large per cent of alcohol, or been mingled with more deleterious drugs, their constant use become a serious evil.

ALCOHOL IN BRANDY, RUM, GIN, &C.—Whatever may be the medicinal properties of these strong drinks, and however useful in cases of sickness, it is very certain they are not fit to be used as beverages.

It is unnecessary to enter into any argument against the use of alcoholic drinks in a work like this, since so many and able arguments are already before the public. Were it not that in spite of all that has been said people will resort to these dangerous stimulants in almost every little ailment,

we should feel that we were not called upon to testify to their destructive tendencies. We lift our voice against them, and beseech every person who has regard for his health and the welfare and happiness of his case, to touch not, taste not, and handle not. If they are to be used as a medicine, let physicians prescribe and furnish them. And when the disease is removed, let them be laid entirely aside. I hope to show a better way to stimulate the system, when needed, than to resort to brandy, &c.

The effects of alcoholic drinks on persons of different temperaments, are quite different. Some bilious and lymphatic temperaments can use them with very much less of injury than the nervous and sanguine. In some forms of disease they can be used with apparent benefit. They have been and are now prescribed by many physicians in pulmonary diseases. We are not prepared to say that there is no benefit from using an article like brandy, which contains a large amount of carbon, in these forms of disease. But we are well assured that there are other articles which would answer a much better purpose and would be free from the evils which follow the use of brandy. We shall hope to see the rising generation using a more rational beverage than that of brandy, or any of the alcoholic preparations.

CHAPTER IV.

CLOTHING.

The legitimate use of clothing is protection from cold and atmospheric changes. Man begins his earthly existence without clothing that he may be able to adapt himself to every climate on the face of the earth. He was made to dwell on every part of the earth that could, by cultivation, be made to afford him sustenance. Most of the animals below him are confined to latitudes or localities, and can not be acclimated to other latitudes, without essentially changing their natures. Their covering, or clothing, is made for them, and adapted to the locality in which they were created. Those in a hot or warm climate, have coarse short hair, while those in a cold climate are provided with thick fur or wool. In a temperate climate the animals change or shed their coat once a year. This change of coat, by the operation of nature, is necessarily slow and would not answer for man. He must be accommodated according to his needs and circumstances, and art, guided by the hand of reason, is much better qualified to administer to his wants, than the steady laws of nature. As he is to gain his bread by the sweat of his brow, his clothing would require frequent change to prevent great heat or sudden cold.

QUANTITY.—What nature demands is simply protection. The quantity of clothing must be varied according to climate, season, exposure and exercise.

The natural temperature of the body is about 100 Fahr. This is maintained in summer and winter. It will be seen at once that when the mercury is at zero, there will be more animal heat expended than

when the mercury is nearly or quite at blood heat. This variation of the temperature is experienced in our middle latitudes every year. Perspiration, or free sweating, is the principal means used by nature to prevent the heat from rising too high. Fire, shelter and clothing, are the means to prevent the body from freezing. The temperature of the body can not be allowed to vary far from the natural standard and maintain health. Clothing and fire, are the principal means for protection. In clothing the great thing to be considered is, to adapt it to the wants of the body. It must be fitted to give perfect freedom to all the natural movements. It must be porous or open, to allow a free escape of perspiration and the gases from the skin. It must be so equally distributed as not to oppress or burden any one part, while another part is left too much exposed. It must be increased or decreased according to our active or passive state.

Quality.—There are four primary fabrics which constitute the principal clothing of man. Woolen, cotton, linen, silk. Wool is a very important article and seems to be well adapted to a cold climate, and the cold season of the year. The cotton is somewhat like the wool, but seems better adapted to a temperate or warm climate, and to the cool seasons of spring and fall. Linen, seems best adapted to the hot seasons or climates. *Silk*, may be regarded as an article of luxury in clothing; being more expensive, it can not come into general use, and partakes chiefly of the same qualities as cotton and linen, and being a non-conductor of electricity and also of caloric, it is desirable in some cases of disease.

We shall have nothing to say of the varieties of colors in clothing, though these may have a little to do with the temperature, as white and black reflect and absorb the heat, making the same fabric somewhat cooler or warmer as the color may be.

Neither shall we say anything of the endless variety of fashions in the cutting and fitting of dresses, many of which are too ridiculous to describe, and have very little to do with the protection of the body. Our sole object, is to secure the body in health, and to give to each individual the best possible chance for long life and happiness. As a general rule, woolen should be worn in cold climates, and in the cold seasons of the year; and cotton or linen in warm climates and in the warm seasons. Where woolen is worn in winter next the skin, as the warm weather in spring approaches, it will be better to substitute cotton flannel and not to make too great a change at once. And then as the warm weather comes on this can be laid aside for linen or plain cotton. The same rule may be observed in the fall, in putting on cotton flannel before the thickest clothing for winter. This precaution will prevent those heavy drafts made suddenly upon the calorific functions of the body which often produce serious disturbances and sometimes end in consumption. To prevent those dreaded colds, from which some people suffer in the spring and fall, attendant upon the change of the seasons and the change of clothing, persons should accustom the skin at all times of the year, to the air, by washing and thorough friction. The clothing should be entirely changed twice per day, morning and night, i. e., not to sleep in the same under clothing we wear during the day. When this change is made at night or morning, we can give the body a thorough rubbing with a coarse towel or sheet, or even with the hand. In the morning or at night water can be used to cleanse the skin, and then by thorough friction there will be such tone and life imparted to it, that very little disturbance will take place when the changes are made in spring and fall. By these means there can be almost entire exemption from colds. Persons,

who are in the habit of keeping the body so encased in thick clothing, during the winter, that the air seldom comes in contact with the skin at any time, will be almost certain to suffer with severe colds and influenzas. To avoid these troublesome catarrhs and colds, take one daily bath, and thoroughly accustom the skin to the air, and all the trouble and inconvenience will be fully repaid. The water should not be very cold. A word should be said here as to the medicinal effect of clothing, or its action upon the system in a diseased state. There is no doubt but the quality of clothing may have something to do with a diseased condition of the skin, or nerves, and possibly of some of the internal organs. In salt rheum, and some other diseases of the skin, linen is preferable. In neuralgia and in cases of rheumatism silk or cotton flannel may be used. In case of a throat or lung disease, woolen or cotton flannel. The electrical condition of these different articles, may have something to do with their action upon disease, as well as that they are conductors or non-conductors of caloric.

AGE.—Clothing should be carefully adapted to the age, as well as the circumstances, of the individual. In helpless infancy, when the heat generating functions of the body are feeble, the clothing should be carefully adjusted so as to afford abundant protection to the child. The common custom, of bare arms and bare necks, in cold seasons, imposed upon helpless children, is an outrage upon good sense as well as upon the tender nature of childhood. Many parents seem to treat their children as if they could bear any amount of exposure withoutin jury. Whereas the truth is, young children are very liable to be cut off suddenly by atmospheric changes, and the want of proper protection. In the prime of manhood the body can bear much more without injury. In old age, again. there should be more care-

ful protection. Many cases are reported where old people were found dead in their beds, in consequence of the temperature of the rooms being reduced too low. When we are in bed we need much more clothing than when we are up; for this reason, that the functions of vitality are much more slowly performed when asleep than when awake.

CHAPTER V.

EXERCISE.

Much has been said and written on the importance of exercise within the past few years, especially since the movement cure has been introduced to the notice of the medical profession. Physicians have at all times been aware of its importance. But there have been difficulties, either in the ignorance of the profession, or in the want of the proper facilities, so that discreet and systematic exercise has not been prescribed to any great extent. We have had our gymnasiums, and we have had our teachers. They have been popular at times, and then fallen into neglect. Physicians have at times strenuously insisted upon exercise, and again discarded it. The popular mind has not been enlightened, either as to the utility of exercise, or, how to secure the most profitable kinds. Ling, the great Swedish instructor and practitioner in the movement-cure, has introduced an entirely new system of exercise for the curing of diseases. These exercises, are mostly of a passive character, and require the presence of the practitioner to give curative efficacy to them. Therefore, while they may be well adapted to the cure of severe diseases, under the hand of a judicious professor, they do not seem to be of a suitable character for popular use, or for systematic development and training of the body with the young, or with those who may not be able to attend upon such instructions. Our gymnasiums again are mostly confined to large cities or villages, and are accessible necessarily to only a very few, and those mostly of the strongest

sex, who, as a general thing, might obtain exercise by other means sufficient for proper development. What seems to be required is, a system of exercise that shall be adapted to schools, and families, and even to private circles, where two or three wish to obtain the advantages of exercise; or, where even a solitary individual can pursue a course of self training, which shall result in a full and beautiful development of the whole physical organization. This is, as will be readily acknowledged, the great end to be attained.

We have a system of exercise, as practiced in many of our water cure establishments in this country, which is simple, and which admirably meets all the demands of exercise in developing the whole body. This system can be so simplified as to be practiced in every household in the land. Individuals can and do practice it, with great advantage, after leaving these institutions. Many a report from individuals who have been in these institutions, has declared, that they had continued the exercises constantly after leaving the cures, and that they had been very much benefited thereby. Some have had much more faith in the system of exercise they had learned, than in the water cure treatment itself. But, the truth is, the system of exercise constitutes a part, and in some cases an important part, of the means for cure. It is very difficult to describe on paper without cuts to illustrate, just the motions and positions for exercise, as practiced in these institutions. These are much more readily learned by witnessing them. They can be described so as to give a general idea of the motions. But it is more important to get an idea of the principle, and then in practice there can be endless variations, and the same end can be accomplished. It does not require the same routine, if the principle be comprehended

we may vary our practice to suit our convenience. The object is muscular development; physical strength; power of endurance; nerve force. These can be attained by a systematic course, even though the peculiar motions be often varied.

Position.—This is the first thing to be attended to in rest or exercise. Every child, and every other person, should be taught a suitable position, in sitting, standing, walking and sleeping. In sitting, the body should be relaxed so as to secure ease and rest. A bolt—upright position is a constrained one. It does not allow sufficient relaxation of the muscles to obtain the rest and ease which is desirable. We should also endeavor, while we secure relaxation, not to allow any cramping of the internal organs, or a contraction of the chest. The position should not be maintained too long at a time, children are often injured in schools by too close confinement to their seats.

When standing, the body should be upright, the feet placed nearly together at the heels, the toes a little out. A free position of the chest should be secured, and at the same time the body should not be bent backward so as to cause a strain across the back and loins. This is the most easy and graceful position in standing.

Walking.—The position for walking is to bend the upper part of the body a little forward and give equal tension to all the muscles of the back and hips. Then placing each foot alternately forward, maintaining the same position of the foot, as was advised in standing, the toes a little out, and bringing the feet down fairly upon the sole without any jar of the body, by causing the ball of the toes to touch the ground or floor first. Many persons make hard work in walking, by bending the body too much, and thereby throwing a strain upon the

muscles of the limbs. A few, by standing too erect weary the muscles of the back and loins. Again, others by bringing the feet with too much force upon the ground or floor, produce a constant jar or concussion upon the spine and brain. There is a *know how* to almost everything in doing it well.

In going through a course of gymnastic exercises, the first thing is to assume the standing position, as has been before described. Then, as is practiced in the *Saratoga Water Cure:*

First Exercise.—Extend the arms horizontally with the body to each side, with the palms down, about one minute; then, the palms up the same length of time, and then, palms back about the same, keeping the muscles tense. After standing in this position about two minutes, in a large class to prevent too much fatigue in the feeble we say "to those who can't hold them up to let the arms fall." The majority will hold up the hands for three minutes. This is a passive exercise, but stimulates the nerves of the upper part of the body considerably, and slightly increases the action of the heart.

Second Exercise.—Fill the chest. This is done by full respiration, and percussion, first with the right hand over the left chest for nearly a half minute, and then with the left hand over the right chest the same length of time, then with both hands over every part of the chest, increasing the rapidity of the motions. The whole time occupies between one and two minutes. This stimulates into pretty active motion the blood in the chest, increasing respiration and pulsation.

Third Motion.—Bring the blood to the hands and fingers. This is done by rotating the arms in a wheel motion for twenty times each, the right arm first, then the left, relaxing the muscles in the hands and keeping the elbow straight. This is a thorough,

but short exercise, and brings the blood freely to the fingers, relieving the heart and lungs.

Fourth Exercise.—A compound motion, bringing the hands suddenly down from the arm pits, with a constrained position of the muscles when down, and relaxed as they are brought up. Twenty times back and forth is the usual number for all these motions.

Fifth Exercise.—A triple motion of the arms, making it complex by striking out suddenly first the right arm and holding it still, then striking out the left arm in the same way, and drawing them both back together, alternating the hands each time by striking out the right first, and second the left, making of each three motions one, and so continue to twenty as at other times. This is quite an important mental exercise, training the mind to control the different sets of muscles, while the corresponding muscles of the other side of the body are resting. It keeps up a free action of the heart and lungs.

Sixth Exercise.—Extend the arms horizontally in front and open the chest by swinging them backward as far as is convenient, and forward till they strike together. This usually warms the fingers thoroughly.

Seventh Exercise.—The legs are exercised by swinging or kicking them back and forward twenty times, relaxing the muscles as much as possible. Here let me say that much of the benefit of exercise is lost by not sufficiently relaxing the muscles of the parts exercised. Alternate relaxation and tension is necessary to secure a free circulation of blood through the dense muscular tissues. Upon this free circulation depends the changes upon which health depends. Persons, who first commence exercising, will often complain of great soreness and stiffness of

the muscles. This is caused by a slight inflammation which takes place in removing worn out matter from the system. This is a good indication with new beginners, and if they persevere will clear out all morbid matter and render the muscles healthy and free from soreness. Many persons are troubled with tenderness or soreness in the muscles because morbid or worn out matter is always retained in the system. The gymnast, or the pugilist who is trained for boxing, has muscles almost as hard as iron, with very little feeling in them. This is secured by training.

Eighth.—This exercise is a hopping motion or a double step, alternating the feet with two steps or hops on each one. This may be continued thirty or forty times. It is a fine exercise and not difficult.

Ninth—Stepping.—A more passive exercise, allowing the heart and lungs to rest. This is done by stepping forward and backward as far as can be conveniently without bending the knee, first with the right foot three or four times, then the same with the left.

Tenth.—This we call the tableau. Placing the right foot forward, bending the knee so as to throw the weight of the body upon the muscles of the leg. Stand in that position for about one minute. Let some one of the class tell a short story or an amusing anecdote at the same time, then raise up and change to the other leg the same way. Then again the right leg, bending the knee in the same way and standing on the balls of the foot or toes, so as to give more strain upon the muscles. The left foot the same.

Eleventh—Balancing.—This is a passive exercise, intended to strengthen the muscles of the foot by raising the body, and preserving a balance, and standing on the toes as nearly as possible, then slowly settling down and throwing the body back on the

heels. Then rising again as before and settling down, bringing the body slowly to the floor by bending the legs, then rising again as before and coming slowly down on one foot, touching the knee and rising again, if you can, without touching the toes of the other foot to the floor ; the same with the other foot. This is quite a severe exercise, but not violent, and is designed to bring the blood to the feet and toes. Persons troubled with cold feet should pursue a similar course to bring the blood into the feet.

Twelfth—Bending.—This is done by standing in an upright position and then bending the body slowly forward as low as can be. Then rising slowly and bending backwards as far as can be easily done. Again rising and bending forward to the right, then backward to the right. Again forward to the left and then back to the left. Then directly to the right and then directly to the left, all without bending the knees. These are passive exercises designed to strengthen the muscles of the back, hips and abdomen. Also it brings into action some of the internal organs, as the liver, stomach, &c. In all these passive exercises the design is, that when the muscles of any part are brought into a tense state, to let them remain in that position, until the blood can have time to permeate through every tissue.

Thirteenth—Up and Down, Back and Forth.—This is a free exercise made by striking the hands together at the lower part of the back and then raising them up and striking them together directly over the head. Continue this twenty times. This exercise is more valuable by its influence upon the chest. You will notice that every time the arms are raised you involuntarily fill the lungs. By this exercise persons nearly drowned, or any case of suspended animation, may be restored by two persons taking hold, one of each arm, and suddenly raising them in quick

succession for several times. This motion forces the air into the lungs and starts respiration.

Fourteenth—The Wind Mill Motion.—This is a constrained motion made slowly by rotating the arms in opposite positions several times. It serves to give action and development to the muscles of the arms and shoulders.

Fifteenth—Quadruple or Four Motions of the Arms.—This is a free and easy exercise made by striking the hands upon the chest, then carrying them up suddenly as high as possible, and down again upon the chest, and then directly down as far as possible. Continue till the number is twenty. There is a still more complicated motion of this kind made by striking the hands suddenly on the breast, then outward horizontally, return to the breast, then upward, return, then outward horizontally again, and return, then downward returning again to the breast as one round. This is a mental, and physical exercise, and will excite very thoroughly the action of the heart and lungs. There are several more of the arm and foot, as well as bodily exercises. But it is not necessary to describe them in particular. Any person will apprehend the object and be able to vary those that have been given, or to add others as the circumstances may demand. We will describe some others, giving a variety which will meet all the classes of physical needs, that can be benefited by exercise.

Sixteenth—The Horseback Exercise.—This brings all the internal organs into action, and is considered by many the most important of all. The class stand firmly on the feet, relaxing all the muscles of the chest and abdomen, and in the first variety simply give a free jolting motion to the shoulders, raising them up and down, giving a free action to the muscles of the shoulders and back. The second variety of this exercise is, to relax as before all the muscles

of the body, and give the motion by the bending of the joints of the knees. Respiration, at the same time, being carefully regarded so that the jolts of the body may exercise the lungs when filled and when empty. By this the liver, lungs, stomach, and intestines, are thoroughly exercised. This exercise for dyspepsia, liver complaint, and incipient consumption, is exceedingly valuable.

Seventeenth—Laughing Exercise.—This usually closes the course. After going through with the variety that has been presented, it will be readily imagined that the blood is circulating freely, and that there is a general glow through the system. This exercise is appropos for the last. It is designed to expel from the lungs all the vitiated gases that may be lodged in the air cells. The whole class stand in position, right hand raised, lungs filled, word is given. The right hand is brought down with the explosive action of the lungs on the breathing aspirate *ha!* Both hands then raised and brought down with a double explosion *ha! ha!* Both hands again raised and brought down with a triple explosion *ha! ha! ha!* Both hands again raised and brought down with the quadruple explosion of *ha! ha! ha! ha!* By this time the company are generally in a mood to prolong the exercise, and there are explosions in quick succession till the hall or house rings with the deep, loud and hearty laugh.

The company are then prepared to separate and to enjoy themselves either in mental pursuits or in a passive condition the remainder of the day. In the summer season we sometimes prolong our exercises by playing ball, pulling at the rope, swinging or dancing. These are a variety which give amusement to the exercise and bring both body and mind into a cheerful and happy state favorable to the recuperative action of the system. We should mention that in our exercises we have two distinct objects in

view, one is to enlarge and purify the muscular system, the other to strengthen the nerves. When we wish to purify the system it is desirable to have a very free exercise and to carry it on even to fatigue. This will purify and strengthen the muscles. But when our object is principally to strengthen the nervous system, we pursue a more passive and cheerful course, avoiding those violent and fatiguing exercises which have a tendency to excite and disturb the nervous functions. For the want of this discrimination, many a nervous dyspeptic has been injured rather than benefited by exercise. We say then to the nervous, who are generally the very first to overact in these exercises, be careful and not fatigue or excite your nervous system. Pursue a more passive course and avoid those extremes which excite the heart and lungs in a violent manner. These need not entirely refrain, but use moderation and depend more upon the passive or constrained motions. Much more might be said on this deeply interesting subject. If persons wish to obtain further knowledge they are referred to Dr. Taylor's work on the movement cure.

The apparent advantages of judicious exercise appear more fully in persons who are feeble, where there is a consumptive tendency; and with the young where the muscles are small and the chest needs developing. We have known the chest increase in size full six inches in a very few months under systematic training. We advise all schools, and all persons who have the training of the young, to carefully study this subject and adopt a wise and consistent course of muscular and nerve training. If we desire to have a healthy generation rise up, both time and money must be expended in securing this object. Especially is this true of females, very few of whom are healthy. There are many who have knowledge enough of exercise to dance, and to play

on the piano, but their chests are miserably contracted, their limbs weak, and they have but little power to endure either muscular or mental labor. With a puny class of females for mothers, what are we to expect of the next generation of men? We hope this subject will receive the attention it deserves. Every village and every town should have a suitable play ground where the young men and boys could exercise in playing cricket or pitching quoits or other games. Young ladies also should be encouraged to exercise in the open air.

CHAPTER VI.

REST AND SLEEP.

Of equal importance with exercise are rest and sleep. These are so little understood by people generally that it seems desirable to treat of them in a separate chapter. So far as can be ascertained all animated nature sleeps. Many naturalists have fancied that all nature has its seasons of repose or sleep. However much of this may be fancy, or how much truth, one thing is certain, the *human race must have sleep.* One of the most cruel and torturing deaths is caused by depriving the subject of sleep. Such cases are on record where after a certain time of being deprived of sleep, the subject has begged and entreated to be shot, or any way to end the torment. The length of time a person can live without sleep varies about the same as that of living without food. Seven days will cause death in some, while others would live two or three weeks. Very few persons die directly by being deprived of sleep. After long wakefulness most people will sleep in spite of all efforts to keep awake. In the midst of bloody conflicts, when the battle has been prolonged, persons have been known to fall into deep sleep even while riding, and in almost every other condition. The precise changes which the system undergoes during sleep are not understood by any physiologist. Many have conjectured that assimilation, the last process of digestion, takes place only during sleep. This seems a plausible conjecture at least. But whatever changes do take place, sleep must be had; and the

most that concerns us in this place, is, to know the best means of securing it. *The quantity, position, &c.*

QUANTITY.—The exact amount of time necessary for sleep in each individual case, must be determined by the peculiarities of the individual. The average amount of time that serves the purposes of vitality in adults is about seven hours. Some can do with less and others require more. The bilious temperament can do with less than the sanguine or nervous. The lymphatic usually requires or takes a large amount of sleep. The nervous are more liable to have their sleep disturbed. The old and the young require more sleep. The infant requires twenty out of every twenty-four hours. Where sufficient sleep is not secured, the subject becomes irritable, the vital powers are depressed, the digestive functions suffer, and the whole system gradually declines. Where too much sleep or indolence is indulged in (for persons may take too much sleep as well as too much food), the mind or intellect is stupid and dull, the physical system suffers in the same way, and the powers of life seem generally depressed and disturbed. Dame Nature is precise in all her claims. She will have her just dues. Neither too little nor too much. While she is patient and forbearing to the delinquent, she remembers every transgression, and exacts her own. In vain we try to deceive. The constant habit of doing with too little sleep necessarily shortens life. Too much sleep will result in the same thing. One wears out too quickly, the other rusts out. If an individual will transgress, he had better wear out than rust out. But, it is better to obey. We honor God our maker by obedience to the laws which he has ordained, more than by any of our own zealous working.

Many rules have been proposed to secure the proper quantity of sleep. Some advise persons who are in the habit of indulging, to arise immediately on the

first waking, and not allow a second nap. The individual in following this rule often becomes nervous and wakeful, and forms habits of wakefulness which seem entirely to defeat the object in view. The business of sleeping as well as of eating, seems never designed to be reduced to a rule. The best rules are to do our work with a hearty good will, with an eye single to the glory of God, having no selfish purposes to serve. And when nature demands sleep, to let the cares of this world be laid entirely aside as we do our garments, and to sleep with as much unconcern as one who has nothing to do with the results of his labors, till the body is sufficiently refreshed, then, with a cheerful heart, to arise and pursue our accustomed labor, "For so does he give his beloved sleep." Students make great mistakes "in consuming midnight oil" and thus depriving themselves of the proper amount of sleep. Business men make the same mistakes, "rising early and sitting up late and eating the bread of carefulness." All these things avail nought. The sluggard makes great mistakes. So the world is full of mistakes, when it would be a great deal easier to do right, and far more profitable.

A few suggestions may be made with profit in relation to our sleep.

First.—Never indulge in late suppers if you wish refreshing sleep. Neither is it desirable to have a keen hunger. Eat your meal from two to four hours before retiring.

Second.—Lay aside your clothing which has been worn through the day. If you are nervous give the whole surface of the body a good amount of friction with a coarse towel or with the hand. Let your night dress be of soft material as cotton or woolen in cold weather, cotton or linen in warm weather.

Third.—Sleep in a cool or cold room. Be sure to make yourself comfortably warm by clothing, or by some warm applications to your feet. It is a great

evil to sleep cold. Persons who suffer from sleeping in damp sheets are injured by the cold rather than the dampness. This causes an evaporation which produces coldness, and this occasions the congestions of the lungs or other organs from which they seldom recover.

Fourth.—Let your sleeping room be well ventilated. If you have a fire in your room, in cold climates the draft from the stove, with its door open, will ventilate well in winter without having a window open. Remember that cold air has sufficient oxygen for respiration during sleep without having too great a supply in the rooms. Avoid currents of air while sleeping. Never cover the mouth and nose with the bed clothing so as to prevent breathing freely of fresh air. In summer, and in cool weather, or in warm climates, it is proper to have our windows open.

Fifth—Position.—There have been many curious experiments made and reported as to the natural position of the body during sleep. Persons who have very delicate nerves and are very sensitive to the electrical conditions are reported as sleeping much more quietly with the head to the north. The worst position, according to this rule, is to lie with the head east; nearly the same west. Those persons not particularly sensitive seem undisturbed by these electrical currents. Some advise to lie on the back, others on the sides. Some with the head elevated, others low. The natural position would seem to be to lie on the sides, on either side as the individual may fancy with the head a little elevated. Most persons will do better to change sides during the night and accustom themselves to sleep in different positions. This will maintain a more natural state of the internal organs. The body should be a little relaxed. The flexor muscles of the lower limbs a little drawn up. Observing these general sugges-

tions a person can hardly fail to secure the necessary amount of sleep. In cases of extreme wakefulness, where it amounts to a disease, we should be very careful not to resort to narcotics and opiates to induce sleep. Many children are seriously injured for life by the miserable habit of giving them anodynes to cause sleep. This is done by parents and nurses to gain time, or to save themselves the trouble of giving attention to the child. We shall say more upon this subject in the chapter on the treatment of infants, in second part. "Balmy sleep is tired nature's sweet restorer." It is the image of death, and shows to man his extreme helplessness.

CHAPTER VII.

RECREATIONS OR AMUSEMENTS AND LABOR.

Every animated creature will seek for pleasure or enjoyment. In a careful analysis of animal existence we find three distinct objects of pursuit. First, the preservation of existence in self-defense. Second, the preservation of life in securing food. Third, the seeking of pleasure. The seeking of pleasure and amusements is more ardent in the young of all animals than in the old. But at every age this is apparent. In the human race it seems a necessity connected with active life. The adage, "All work and no play makes Jack a dull boy," is truthful and important. Seeing there is this necessity in our being, it becomes an important enquiry among those who have the direction of the means for health, to ascertain the kinds of amusements which will best answer the end of our being.

We shall not dwell in this work upon the various kinds of amusements, as that would be foreign to our purpose. But we will endeavor to point out some of the good and evil influences connected with recreations. We can say that in suitable recreations there is an exhilaration to the animal spirits which has much to do with the preservation of health. In innocent amusement it is of no great account what the kind is provided the animal spirits are enlisted so as to give joyousness or cheerfulness. This "merry heart does good like medicine." Therefore to cultivate a cheerful, happy spirit is the great object of recreation. In our labors, without amuse-

ment, we become too much engrossed. The cares of business corrode and eat up the animal spirits; the mind becomes depressed and the flesh weary with the burdens of life. These burdens must be thrown off, the body must be relieved, and carping care must be turned away. All this is done by suitable recreations.

Children require much time for play and should have it. The child that is restrained from innocent play when young, will be likely to go to some extreme of folly when older. Children are much more likely to become steady-minded, sober and industrious, when they come to years of maturity, if they have been allowed full and innocent recreation in childhood. Teachers, parents and guardians, should be fully aware of the health-giving influences of proper amusements and should carefully provide them for those under their charge. The great danger arising from these amusements is, that of running into dissipation. Habits of profligacy, frivolity and folly become formed, which may embitter all their future days. Guard well then these avenues of trouble. Provide suitable amusement for the young, and both the moral and physical system will be preserved in better health and strength. In connection with recreation and amusement, and that which gives zest and virtue to them, is labor; labor, either mental or physical, is the great business of man. This is the duty of all. No one should be allowed to feel that he has any right to share in the blessings which the great Creator so freely bestows upon the children of men as a reward of their industry, unless he is contributing daily, when he has ability, to the efforts that are necessary to secure these blessings. This earth will yet be redeemed from the thralldom and curse of sin. Much labor is to be performed before that bright day will dawn upon us. In every depart-

ment or field of human labor there is abundant work to be done. The physical, the mental, the spiritual, all need cultivation. In the field of medical science much is to be done in developing more vigor in the physical system, in preventing sickness, in prolonging life, thus contributing to the more effective power of the human race. This subject opens a large field of thought to which we invite the attention of all the lovers of mankind.

CHAPTER VIII.

DISEASE.

One of the most perplexing questions with which the medical student has to contend, meets him at the very outset of his profession, and for the want of a clear and distinct answer to which his whole future practice is involved in doubt and uncertainty The question is, *What is disease?* It might seem to the novice in medical subjects that this was a very easy question to be disposed of, and therefore it should not be the occasion of any perplexity in medical practice. Plain as it may appear on a superficial view, the more critically it is examined the more mysterious it becomes, until the student seems to be lost in a labyrinth of mystery. At least, so it has been in medical schools. Different and conflicting theories have been propounded, large treatises have been written in defense of the different theories. Some have been exploded by the light of science, while others stand upon a tottering foundation waiting only a further advance in science to bring them into the same unpopular condition. Volumes have been written endeavoring to elucidate this simple but important question. In a work like this, we do not expect to enter into any *particular* discussion of this subject. The great business that concerns us, is to simplify as much as possible, every department of medical science and practice, so that we may be able to secure the ends we seek, even if we are not made fully acquainted with all the mysteries that may be associated with them. The simple question: *What is disease?* may be answered so far

as any practical utility is connected with the answer, by saying, "IT IS AN INABILITY OF ANY ORGAN OR ORGANS OF THE SYSTEM TO PERFORM THEIR NORMAL FUNCTIONS." Whatever may be the remote or proximate cause when disease is fairly developed in the human system, this *inability* is always present and may be properly said, so far as any practical advantage may arise, to constitute *the disease*. Whatever objections may arise to this definition, they are more theoretical and fanciful than practical, and are therefore no real objections. People generally require a *practical view* of any subject which concerns their interest. They wish to know what is to be *done*. If we can so present this or any other subject that they shall see what is to be done, it is the great thing, above all others, they desire to know. We maintain *this theory* of disease is eminently practical, and therefore answers the purpose in our every day matter of fact life. In every form of disease, however simple or complicated it may be, there is present with it an inability of some organ or organs to perform their functions. Remove this *inability* and you remove the disease. If this *inability* remains your disease remains. So far as the choice of remedies or medical application is concerned we shall endeavor to show that nearly all medical prescriptions are based upon general principles, and are as well adapted to meet the indications of a cure on the theory of *inability* as on any other theory. And especially since this question remains unanswered, or if answered by any school of physicians another school equally popular will give a different answer, and yet both schools of physicians will practice the art of healing, with their contradictory theories, with nearly the same popular acceptance. Theory then, in medical schools, has very little to do with their practice.

We insist then, it is of but little account in practice what form disease assumes, whether consumption,

scarlet fever or rheumatism. *Inability* of some one or more of the organs of the body, to perform their functions, is always present. So far as the general medical applications are concerned, this *Inability* is of paramount importance to the practitioner in making his diagnosis, prognosis, and prescription. He inquires into the cause or causes of this inability. His medical prescription is, or should be, carefully prepared with an eye upon both the cause and the effect. So far as he is able he should remove the causes. If they have ceased to operate or are entirely out of his reach, then he has to deal only with the effects or the inability, which, to all intents and purposes, is the disease. We have not space, neither do we deem it necessary, in a work of this kind, to enter into a labored argument to prove the truth of this theory. We believe it perfectly susceptible of proof. But, we shall endeavor to show that a medical practice, based upon this theory, is rational and adapted to every conceivable form of disease. We have then, under this theory the *unity* of disease insisted upon by eminent medical men; and also unity of medical applications. It is not necessary under this theory that we have a specific application of medicine for every form of disease; but it recognizes the recuperative or healing power of the system, or the "*vis medicatrix naturæ*," as the great power to heal. It makes its medical prescriptions in harmony with that power. It continually keeps in sight the *Inability*, and its cause, and deals gently and wisely with the vital forces in removing foreign agents from the system. It would not utterly discard any agent in nature as a remedy in some form of disease; but it would entirely condemn that class of remedies, which were not in harmony with the vital functions as a stimulant or nutriment; or were not adapted to act either mechanically or chemically on the causes of

disease. It does not accept as truth, that what would be death, or a severe poison to a well man, would be wisely administered to a sick man as a medicine. It would not reject any substance simply because it had the reputation of being a poison, but for the reason only that it was not adapted to the case as the best, or as a curative agent. It would always require the selection of the most simple remedies to meet the end in view. This theory of disease therefore becomes more practical, more simple, and is less objectionable than any other theory. We hope to show in the future pages of this work that under this theory there is a beautiful simplicity, and at the same time an efficiency which will commend it to every thinking mind.

CHAPTER IX.

WHAT IS A REMEDY?

Under the uncertain and mysterious theories which have been advanced to explain disease, it is no wonder that there should be mysteries, confusions, contradictions, and absurdities, in the practice of medicine. If mystery is connected with the nature of disease, mystery will also be associated with the art of healing. Quacks and charlatans will flourish on this mystery. The people have no knowledge, therefore are they duped by every boastful pretender. The greater the bombast of the pretender, the more will he impose upon the ignorant and credulous; if he have cunning and shrewdness, he is sure to make a fortune. Honorable practitioners looking on, and knowing the game that is being played, come to the conclusion that the people love to be humbugged. Some of these honorables, seeing the success of the quack, and having an itching to share the spoils, turn in and humbug the people too. So the game is being extensively played at the present time in these United States. Honorable physicians utter their protest; but it is of no avail. They ought not to complain. They are themselves mostly responsible for this state of things. The mystery thrown around disease, and also about the practice of medicine by the medical fraternity, is the legitimate cause of all this quackery. If disease be a mystery, then the practice of medicine is an enigma. The more profound this mystery, the more doubtful and perplexing is medical practice. The people, being made to believe this, are entirely at the mercy of medical men. If our popular physicians, were

uniformly successful in practice, they might enjoy an enviable reputation. But the great uncertainty which attends their prescriptions, has seriously impaired the confidence of the people in their skill in curing disease; and in their distraction, they fly to any source, which promises the blessings they seek at the hands of medical men. Physicians will find but few families who are so perfectly resigned to their fate as to see one member after another sink into the arms of death without raising a doubt as to the skill of the practitioner who attends them. If this comes to be a question, woe to the physician. And as this physician may stand high in the profession, no wonder if in their perplexity the afflicted ones apply to men of much humbler pretensions. And as sure as they find relief from these sources, they will ever after be in favor of those from whom they obtain such timely aid. No—the medical schools have themselves to thank first and chief, for the greater part of the quackery connected with the practice of medicine. If they wish to prevent this, let them base their practice on simple principles, put away their jaw-breaking technicalities, and let the people understand just what they are doing. Let them present a simple, rational theory of disease, and a simple consistent practice, and they will receive the honor which their profession justly deserves.

But what is a remedy? With the theory of disease, here presented, ANY SUBSTANCE OR AGENT IN NATURE WHICH REMOVES THE CAUSE OF DISEASE, AND RESTORES ABILITY TO THE ORGANS, WOULD ACT UPON THE HUMAN SYSTEM AS A REMEDY. The article which would do this, in the shortest space of time, with the least injury to the organism, would be the *best remedy*. Here is a wide field for the physician. He is not necessarily confined to one agent, however valuable it may be. He has the broad resources of nature to explore, and he evidently needs wisdom to

guide him. He must not overlook the simple, neither must he neglect nor be unable to understand the profound. He must question NATURE at every step. He must understand both the *condition* of the system and the *cause* of the disease, and the *qualities* and *adaptation* of his remedies. This prepares him to administer the healing art wisely.

There are three distinct departments in medical practice which necessarily claim the attention of the physician. The *mechanical* or *surgical*, *chemical* and *functional*. The mechanical or surgical department, embraces those forms of disease where the knife of the surgeon is required, or some mechanical apparatus to sustain weak or broken parts of the body. This department of medical practice is in a much more honorable position before the world than the others.

The chemical department of the practice of medicine consists, in the use of certain substances which are supposed or known to neutralize certain other substances, either in the human body or out of it. This is a very important department and requires great wisdom in the administration. It is that in which the use of poisons may be admitted if in any. That one poison may, and often does, neutralize another, and render the compound more harmless than either of the substances alone, is an established fact. Thus, a strong alkali is destroyed by an acid, or by oil; and so with various other substances. But no department of the practice of medicine, is more liable to mistakes and abuse than this. The chemical affinities of the different substances in nature, are so extremely particular, that it requires a skillful hand to make a laboratory of the human stomach and introduce substances, known to be inimical to the body, often merely upon the supposition, that there is in the body some other substance acting as a poison which may be neutralized and rendered harmless by another poison. We believe this is sometimes done. But

probably, more often both substances act either compoundly or separately as poisons upon the living organism, and what might have been comparatively harmless if left to the natural powers of the system, becomes complicated and dangerous. Many physicians are in the habit of prescribing these dangerous chemicals, on almost every occasion of indisposition. Calomel, corrosive sublimate, quinine, Fowler's solution of arsenic, tartarized antimony, and many others more or less virulent, are prescribed and administered, with seemingly very little reflection as to the object they have in view in giving them, or the nature of the articles themselves. These and kindred articles should not be administered as remedies, unless they can be depended upon to act specifically upon some known virus in the system; and even then, they should be administered with great care and precision, and generally in homœopathic doses. It is well known that all chemical substances having an affinity for each other, unite in definite quantities. If too much be given, even though it should be of the right substance, serious injury may arise from it. If the wrong kind be given, then the less the better. We do not say that these and kindred articles never act as remedies, but we do say, they are for the most part very uncertain in their good effects, and that the good which is sought from them, can be obtained with much more certainty, by entirely different treatment, and attended with little or no danger. Under the definition we have given of a remedy, the mercurials and other chemicals might, under certain circumstances, be considered as remedies. But very seldom will such cases be found, and still more seldom where they could be called the *best* remedies. We earnestly protest against their common use, and advise physicians, and invalids, to make trial of other means, before running the risk of life or lasting sickness, by using these dangerous agents.

The FUNCTIONAL DEPARTMENT of the practice of medicine consists in removing some obstruction in the circulation, or equalizing the nervous action, supplying the system with proper aliment, directing the necessary exercise and rest in developing and strengthening the different organs of the body; also in eliminating from the body worn out particles, and malarious substances, thus giving tone and endurance to the whole. This is far the most important branch of medical practice. There are comparatively few cases requiring surgical treatment. There are probably more cases which would come under the department we call chemical. But almost every individual needs to be advised by a physician in relation to *functional treatment*, in order to give symmetry, beauty, and uniform health to his physical organization. In this department it is seldom that medicines are required even in severe cases of disease, where there is functional disturbance only; a suitable course of water, diet, exercise and rest, is all sufficient for restoration. In scarlet fever, typhus fever, and other diseases where there is supposed to be some malignant virus, this treatment is a sure remedy. We hope to make it appear, and give practical demonstrations, that various simple agents and applications, which have been often overlooked and disregarded by medical practitioners, may be relied upon as the very best of remedies.

CHAPTER XI.

WATER A REMEDY.

What! some are ready to exclaim, *water a remedy!* One of the most simple and common substances in nature, useful indeed for culinary purposes, being the chief ingredient in turtle soup, answering well as a foundation for making good coffee and delicious tea. Will do sometimes for the purpose of diluting whiskey and brandy, and out of doors will answer to turn the wheels of our busy factories, and also in the fields for cornstalks and cattle, for grass and greens, and various other similar operations; but, to make it a medicine to cure the sick is altogether too high a use for water. Something "far fetched and dear bought" meets the ideas of people generally, as a medicine; they are not willing to be cured by so simple an article. They had rather be sick and take a potion of delicious calomel and jalap, or a dose of those beautiful stomachics ipecac and tartar emetic, or have their bodies flayed by the excoriating cantharides; or feel the pleasant "ad deliquinum" produced by the point of the glittering lance, penetrating some venous cavity, or a thousand other similar operations will be submitted to rather than to "wash and be made whole." But enough of this, our object is to show that water, simple though it be, is one of the most efficient remedies in use. Very few people have even the remotest idea of the efficacy of *water* as a remedy. Some, who have heard of water cure establishments suppose that water is used as a remedy in some way, they can't conceive how; but generally imagine the subjects are nearly drowned, quite frozen, and half starved. Whenever

the subject is mentioned they feel a chill passing over them, and conclude, if such is the treatment at the water cure, it will be a long time before *they try* it. COLD water, *damp sheets, severe colds, rheumatism* and *consumption* are associated in the minds of many people with water cure, and some are afraid even to wash their face and hands unless a little whiskey is added to the water to prevent their taking cold.

But *Water is a remedy* in spite of all their fears, and its remedial power need only to be known to insure the entire confidence of the intelligent. To ascertain how water acts as a remedy, it is necessary to understand how any remedy acts in removing disease. We do not say water is the only remedy; *that* is not our doctrine. Neither do we say that it is applicable in every form of disease. But we do say it is a most efficient remedy and can be adapted to a greater variety of the forms of disease, than any or all other articles used as medicines. In the Surgical Department of medicine water is not expected to be the knife, but it makes the best dressings that can be applied, and in many cases it is invaluable by its cooling and cleansing power, thus often saving the use of the knife. *In the Chemical Department of medicine* nothing can be done without water. It is the medium by which the different chemicals are so diluted as to be brought into proximity to each other, making it possible for them to be neutralized by each other. But water often performs a more important part. It can and often does act on acrid or poisonous substances, diluting them to such an extent as to render them harmless upon the system. Thus, poisons and substances of an acrid nature, can be better removed from the stomach by the copious drinking of water than by the use of any poisonous chemicals. It is perfectly harmless and thorough emesis can be produced by it. The water may be

warm, hot or cold, and taken as freely as you please without injury.

In the Functional Department of medicine, water may be made to meet every indication of cure. Is an emetic required? warm water drank freely will usually produce the desired effect. Is a cathartic called for? The copious drinking of water often causes a free movement of the bowels, and used as an enema will do better in ordinary cases than physic. As an antispasmodic, the warm applications of water affect the system like an opiate. As a tonic, water either cool or cold is decidedly strengthening. Does the system need a stimulant? water taken hot, and drunk or applied in the form of the hot fomentation over the epigastric region is altogether superior to brandy. So also as a diaphoretic, a diurectic, or a nervine, water will cleanse and quiet the system more than drugs. We do not say that it is a narcotic and that it will stupefy and intoxicate like opium or alcohol; with such operations water has nothing to do. Neither do we say but there may be times when such effects are desirable, and that it may be proper to resort to drugs whose known qualities will produce such an effect. But we do say, from many years' experience, that for healing, soothing, quieting and restoring the system to health, water stands pre-eminent above each and all kinds of drugs and medicines. We shall endeavor to show its specific applications and effects in future chapters. Meanwhile it is proper here to observe that the use of water as a remedy possesses so many and peculiar advantages, that it deserves the careful and candid examination of all medical and all intelligent men. If water in its various applications can thus be made to serve us in times of sickness, what dangers we may avoid, what sufferings escape!

CHAPTER XII.

CLASSIFICATION OF DISEASE AND GENERAL REMARKS.

In our classification we shall not be governed by any of the technical nomenclatures of the medical schools. We shall endeavor to present some simple and natural divisions chiefly for the convenience of the nurse and invalid. What they are mostly concerned with is a knowledge of the nature of the disease and its treatment. There is a natural division of disease into families or groups, making either the organ affected or the cause producing it, or some other circumstance, the family name. Thus scrofula is a family name, embracing a variety of maladies, such as tubercular consumption, king's evil, salt rheum, erysipelas, tumors, abscesses, &c.

For particulars in this classification see table of contents.

Neither shall we be governed in our medical applications and prescriptions by any rules laid down in medical books, nor by the dictation of the schools of medicine. Our theory of disease being simple, embracing every variety of human ailments, and bringing them under one general principle of classification, enables us also to choose remedies which partake of the same universality, and acting on general principles, are applicable to a great variety of the forms of disease, without violating in any measure the known and established laws of vitality. Should there seem to be a sameness in our prescriptions and remedies, it will be remembered that this is entirely consistent with our theory of disease, and also with the known and acknowledged principles of therapeutic action.

Persons disposed to complain of this simplicity and uniformity would do well to examine carefully other theories of disease and medical prescriptions, where we think they will find sufficient to satisfy any candid mind that there is no other theory which offers any advantages over this, either by explaining more fully the nature of disease, or by making more explicit medical prescriptions.

As we have divided the practice of medicine into three distinct departments, the Surgical, Chemical, and Functional, in these different departments, diverse medical prescriptions and applications are allowed, it is evident we violate no principle of the healing art, even if we use severer remedies, provided the remedy be *the best adapted* to cure the complaint. But our object should be to cure with the *simplest remedies* which nature provides. For this purpose we classify the different forms of disease under the most simple arrangements, and give both general and specific directions to meet the various modifications and diversities of human suffering.

Some persons may be disposed to object to the use of so much warm and hot water, as we have prescribed in the cure of different forms of disease. Such persons should reflect that we are prescribing for the most part for the first stages of disease, and for those forms where the fluids are in a vitiated or depraved state, where the cleansing and relaxing process must first be secured, and that hot or quite warm water is essential to produce such effects. We use hot or warm water for cleansing and relaxing, and tepid or cold as a tonic. When we have attained the first condition then we are prepared for the second. We shall, however, hope to give in the sequel abundant proof that our prescriptions are based upon correct principles of pathology, and are rational, practical, and efficient.

Description of the Medical Applications of Water.

Hot Fomentation, No. 1.

Have in readiness a quantity of hot water, then spread on a bed two comfortables, two blankets and a coarse rubbing sheet; each of them should be warmed in cold weather. Let the patient undressed recline upon the sheet, the attendant quickly spreading one side of the sheet over the limbs and body, and then the other side smoothly but not tightly; then again each blanket and comfortable in the same manner, taking care to tuck the edges under the patient so as to retain the heat, leaving the coverings loose about the chest. The hands may be laid over the lower part of the chest, or down at the sides, as preferred. A tin fomenter must next be filled with hot water and placed at the feet between the blankets and comfortables in such a manner as to render the feet thoroughly warm ; and a towel of four thicknesses wet in cold water should be placed on the forehead. An old linen sheet of loose texture should be folded of such size as to be sixteen thicknesses; this should be wrung out of water as hot as can comfortably be borne and laid over the chest, the blankets being quickly and snugly folded over the sheet and closely around the chin. The patient should now rest ten minutes, the sheet wrung out of hot water should be replaced on the chest and bedclothes arranged as before. This should be repeated every ten minutes for an hour or more, according to the severity of the attack, and the temperature of the water gradually increased if the patient be able to bear it. The hot sheet should always be placed over the seat of disease or region of pain, except in heart affections. Should the attack indicate pneumonia, inflammation of the lungs, or pleurisy, changing the hot sheet should be continued

until relief is obtained, unless found to be too exhausting.

The towel applied to the head should frequently be wrung out of cold water and kept on during the foment; if this should prove insufficient to prevent a rush of blood to the head, pieces of ice should be wrapped in the towel and laid on.

In some cases where the attack is not too violent, after the hot sheet has been wrung out twice, a tin fomenter of hot water may be laid on the sheet and the heat thus continued for an hour without changing the sheet. But, in all violent attacks, the more efficient course is to wring out the sheet every ten or fifteen minutes. Should it be difficult to get the patient into a perspiration, place also one fomenter under the knees and one under each shoulder. The cloth used for a foment should always be linen, an old table-cloth will do well, cotton will not apply itself. A fomentation should always be given in a warm room. If the foment be used for a person half grown, a sheet of half the size will be sufficient.

Hot Fomentation, No. 2.

This includes the previous process, and can be applied while the patient is seated in a chair, with the feet immersed in quite warm water, and in some cases it is preferable to No. 1.

Hot Fomentation, No. 3.

Have at hand a supply of hot water and half a blanket, which should be folded of convenient size for covering the chest, and for tucking snugly under both sides of the body; place it next to the skin, tuck it under one side, then fold two large linen towels together about half the size of a foolscap sheet, and while the patient is lying down, wring them out of hot water, and lay them on the affected part

under the folds of the blanket, which tuck closely under the other side, taking care to avoid dampening the bed, or wetting the patient's garments. Continue to wring the towels out of hot water, and apply them every ten minutes for the space of from a half hour to an hour and a half, according to the severity of the case. After sufficient relief is obtained, carefully draw out the towels and with a small wet cloth wrung out of warm or cold water according to the case (the hand carefully placed under the blankets), sponge off the moistened portion of the skin, and wipe the same dry with a towel; then remove the blankets and see that the patient's clothing is dry and comfortable, as it always should be, when proper care is taken. Feeble persons often derive great benefit from this process.

Wet Sheet Pack.

"*Mode of Application.*—Two or three woolen blankets are first spread out smoothly upon a mattrass; over them is spread a linen or cotton sheet, wrung out of water at a temperature of 72° to 110°. The patient then reclines at full length upon his back, on the wet sheet, with his hands folded over his breast. The attendant reaches over and quickly grasps the opposite edge of the sheet and draws it snugly over the body; the right edge of the sheet is served in the same way, and also all the blankets, tucking them as closely as possible under the body, especially about the neck and feet; over all this, may be thrown as many blankets or comfortables as the patient may seem to require, to produce a speedy reaction. The first impression produced by the application of the wet sheet is, to most persons, disagreeable, but a delicious glow soon supervenes, inviting the patient to a quiet sleep or pleasing reverie. If the feet are at all inclined to be cold,

the wet sheet should not cover them; let them be wrapped in the blankets only.

If there is any congestion or fullness about the head, a compress wrung out of cold water, should be made to cover the whole scalp and changed as often as it becomes warm. A glass of cold water may be given the patient to promote perspiration, if such a condition is desired.

The length of time the patient should remain in the pack depends upon a variety of circumstances, but usually from thirty minutes to an hour and a half. If in twenty or thirty minutes no reaction takes place, and the body is still cold, the patient should be removed and rubbed dry and warm with the crash towel and bare hand of the attendant—and the pack repeated at some other time. The pack may be given at any time during the day, but never immediately after a meal; not until at least two hours afterward. At hydropathic institutions, it is usually applied in the morning, before breakfast, or at 3 o'clock in the afternoon. When the blood is impoverished and there is but little animal heat, the patient should receive the pack, if at all, in the afternoon, as the necessary reaction is much more readily induced then than at any other time of the day. If the subject should fail to get warm after the second or third trial, you may be assured that the pack is not the appropriate treatment, and the *dripping sheet* or the tepid salt friction, hereafter to be described, may be substituted.

The pack is generally followed by the shallow bath, half bath, dripping sheet, or sponge bath, or when there is but little vitality, the salt friction. The patient now dresses himself as quickly as possible, swallows a glass of cold water, and starts out for a brisk walk, or if unable to walk, exercises in some way within doors, or retires to bed.

For a number of years past we have made use of

a novel method of wet sheet packing, which we believe is not generally known to the public or the profession. The process is as follows: But two articles are necessary; 1st, a loose dress made of linen sheeting, or common *crash*, to cover the whole body, with arms and legs, open in front, and with tape strings for lacing closely to the body. This should be so made as to fit snugly around the neck and shoulders. 2d, a large gown of *oil silk*, made similar to a gent's morning wrapper, and long enough to come over the feet. The whole to be covered on the *outside* with cotton cloth, the covering being necessary to support the silk. The silk should be of the best quality.

"All that is necessary for the patient to do to prepare himself for the enjoyment of a 'good pack,' is to wrap himself snugly in the above dresses, after thoroughly wetting the first, and then recline on the bed or lounge; in a few minutes he finds himself in a fine glow."

The Wet Compress.

"The wet compress may be made a very good substitute for the pack, and may be used for a twofold purpose, for diminishing and increasing action, and is usually designated as the refrigerant, and stimulant. The compress is made of a towel or piece of flannel folded several times, wrung out of water and placed upon the affected part. For the refrigerant effect, the compress should be wrung out of water at the lowest temperature, and changed every five or ten minutes, or sufficiently often to produce the desired result.

"The stimulating bandage differs from the first by its being covered thoroughly with two or three folds of cotton or woolen cloth so as to prevent a rapid evaporation, and should not be changed until it is

dry, or nearly so. This compress may be applied to any part of the body when a stimulating effect is desirable, especially to the throat, abdomen and joints; and in very many forms of inflammatory disease, it is the best substitute we have for the wet sheet pack, where the latter can not be conveniently applied.

"Again, by using what is called the *fomenter*, or Tin Can about twelve inches in length and ten in breadth, one inch thick, and of an oval shape, so as to fit the body closely. This is filled with hot water and applied over a common towel, or flannel, if preferred."

Sweating Pack.

"The mode of applying the sweating pack differs from that of the wet sheet pack only in the absence of the wet sheet, the dry woolen blanket coming in contact with the body. As in the wet pack, a sufficient number of comfortables or other clothing should be added to retain the animal heat, and thus promote perspiration. The cold wet compress should also be applied to the top of the head and changed as often as it becomes warm; the heated brick or the tin *fomenter* should be placed to the side and feet of the patient when there is the least difficulty in getting warm. Dr. Johnson of England, has recommended the drinking of hot teas while in the pack to promote sweating, greatly to the horror of some of our Water-Cure brethren, but in our own experience we have found warm drinks of much benefit in extreme cases where there was a great deficiency of animal heat. No definite rule can be laid down as to the length of time the patient should remain in the dry or sweating pack. Some will perspire freely in one hour, others require from two to four hours' confinement.

Never go into the pack while the body is cold;

some kind of exercise should be taken if possible, and in many instances the blankets should be heated before the fire previous to enveloping the patient.

"The dry pack is, to many persons, anything but an agreeable process, especially the first application of it. It sometimes produces nausea, giddiness, headache and faintness, and should be taken with caution, and generally by the advice of a hydropathic physician. The patient should not be allowed to remain long in the pack after he has commenced sweating profusely. The sweating should not be carried so far as to exhaust the patient, and on the first symptoms of nausea or giddiness it should be discontinued. This remedy, however, is of minor importance, in a majority of cases, when compared with other means within the reach of the hydropathist, and is much less frequently used by us now than formerly. We shall say more of its comparative merits when we come to speak of those diseases to which it seems applicable."

Dripping Sheet.

This process is sometimes known as the rubbing wet sheet, and is applied in the following manner: A coarse linen or cotton sheet of good size is slightly wrung out of water at the desired temperature, and immediately thrown over the shoulders of the patient, when the attendant commences rubbing briskly the back, abdomen and limbs, the patient at the same time, if able, rubbing his chest, arms and neck. The friction should be *over* the wet sheet, not *with* it as is frequently done. This operation continued from one to five minutes, the wet sheet is removed, and a dry one substituted. The rubbing is continued as before, until the body is perfectly dry and the patient experiences a warm glow over the whole surface.

The dripping sheet is one of our most useful baths

and may be considered a sort of connecting link between the sponge bath and the full immersion, being more invigorating than the former and less exhausting than the latter. It is particularly adapted to home treatment, as it can be given by any one with little labor and inconvenience."

Half Bath.

"This valuable bath is usually given in a tub made of wood or tin, five feet in length, two and a half feet in width, and about twenty inches high. The depth of the water in the tub should not exceed six or eight inches, the temperature ranging from 50° to 106°. The patient sits upright (does not lie down, as some suppose), and is rubbed smartly by the attendant. The length of time the patient should remain in the half bath depends upon the object to be attained — if stimulant and tonic, from two to ten minutes — if derivative, from twenty to sixty minutes. On coming out of this bath a pail of water at a little lower temperature should be dashed over the shoulders and the patient then rubbed thoroughly dry and warm with the dry sheet, after which some kind of exercise must be taken if the invalid can bear it."

The Full Bath,

"Is given in the same kind of tub as the half bath, but, instead of sitting upright, the whole body is immersed; the length of the time and temperature depends upon the disease and the strength of the patient; say from ten minutes to one hour. As a general rule, the invalid should wet with cold water the face and head before entering either the half or full bath."

Pail Dash.

"In applying this bath the patient stands up a few feet from the bath attendant, who throws the water

from a bucket with considerable force upon the back and shoulders; if a second pail is given, the patient turns and receives it upon the chest; a dry sheet is immediately thrown around the body, over which smart friction is used until he is dry and warm. For all feeble persons and those who seem to require only a tonic, the pail dash is, perhaps, superior to any other. In the treatment of females, suffering from great nervous irritability, it is much used.

The Pail Pour,

Is only a modification of the pail dash, the water being poured over the shoulders and back instead of dashed, and may be given when the pail dash proves too stimulating.

Sponge or Towel Bath.

This is one of the mildest forms of bathing, and is generally used as preparatory to a course of water treatment. It is given by rubbing the body thoroughly with a towel or sponge dipped in water at the desired temperature, say from 50° to 80°, the operation lasting from one to five minutes, when the person is rubbed, as in the above baths, with the dry sheet. It is an excellent bath after either the dry or wet sheet pack, and especially when it is necessary to reduce rapidly the heat of the body as in fevers and inflammatory diseases generally. It may also be made a mild tonic for feeble patients when used at a temperature of from 52° to 72° and continued only for a half minute. A little salt is sometimes added to the water to increase the tonic effect.

The *friction* is simply rubbing the body with a towel, either dry or thoroughly wrung out of water. The water may be either salt or fresh, and when used, it should be followed by friction with the dry hand, and the body exposed to the air a few minutes before

dressing. This is one of our best remedies for night sweats, especially when a little salt is used, and is given to the sufferer just before he retires at night.

Shower Bath.

This bath is almost as old as the art of healing, and in every house in this country where the im ortance of frequent bathing is understood, the shower bath will be found. In many complaints it is a valuable remedy, but should be made use of in home treatment with extreme caution, owing to the highly stimulating and tonic effects which it always produces. Excessively nervous persons should never take the shower bath. It consists of a large number of little streams of water falling from a basin suspended a few feet above the person, the bottom of the basin being filled with very small perforations for the purpose. *The shower should never be allowed to fall upon the head*, but upon the neck, shoulders, back, chest and limbs. In a great majority of cases the shower bath is far inferior to the pail dash, for domestic use, and we may say that it ought never to be used without the advice of the physician or some one well acquainted with the modus operandi of the various baths.

The Spray Bath

Is an improvement upon the above, and can only be used in hydropathic institutions, where a peculiar apparatus can be arranged for the purpose. The same may be said of the *flow* and *hose* baths, both of immense value in the treatment of many chronic diseases, but their use will always be confined to public establishments for the cure of the sick.

Sitz Bath.

"This is sometimes called the sitting or hip bath, and may be taken at home in a common wash tub, when no other can be had, but a tub constructed for the purpose, with a convenient back to it so as to allow the patient to sit upright with ease, is much better. The tub may be made of wood or tin, the latter being preferable on account of its lightness, as it is often very necessary to remove them from one room to another. The diameter should be eighteen inches, the height inside nine inches, the bottom being three inches from the floor, and the back eight inches high, well painted, with side straps of leather for handling it.

"The length of the sitz bath is from five minutes to half an hour—temperature from 40° to 110°. If a derivative effect is desired, make the temperature from 75° to 100°, and length from fifteen to thirty minutes—if tonic, the temperature should range from 40° to 75°—length, three to ten minutes. If a very stimulating effect is desired, the water should be as cold as possible, or very hot, and the time not to exceed five or ten minutes. A cloth wet in cold water should be kept constantly upon the head—this should never be forgotten."

The Foot Bath,

"Although simple in its nature, is nevertheless one of the most valuable of all water cure appliances. It may be given in a small tub or keeler; the water should be only two inches deep, instead of five or six inches, as many suppose, and at all temperatures, from cold to as hot as can be borne, according to the object desired. When the temperature is raised higher than 90° it should be followed by dipping the feet for an instant into water at 70°. As a derivative in difficulties of the head and chest, this

bath is of the greatest benefit, and as it can be applied in the family with so little difficulty, it is of almost universal use."

Chest Wrapper.

This is used chiefly in hydropathic establishments, but may also be of great service in domestic treatment. It is made of coarse crash toweling or coarse cotton cloth, and is very similar to a gentleman's vest in shape, except that it is whole in front, and made to tie or button behind. It should be cut so as to fit well about the neck and to come down nearly to the hips, and fasten with tape strings. Over the inner or wet jacket is worn another of the same shape and size, made of flannel or oil silk.

Great judgment should be used in the application of the chest wrapper. If the patient does not get warm under it, after two or three days it should be discontinued. Sometimes by very feeble patients, it can only be worn during the middle of the day. Let it be omitted at night if it produces restlessness. But if there be a proper reaction, and the effect of the wrapper be agreeable, it may be continued any length of time, according to the judgment of the medical adviser.

The Temperature

Of baths may be divided as follows:

Cold	32° to 60°
Cool	60° to 70°
Temperate	70° to 75°
Tepid	75° to 85°
Warm	85° to 100°
Hot	100° to 120°
Vapor	105° to 130°

No arbitrary rules can be laid down in reference to the temperature of any particular bath. As a

general rule, the feelings of the patient must be consulted, for what would seem warm to one man might be cold to another, owing to the condition of the circulation. In commencing the water treatment with very feeble persons, too much care can not be given in adapting the temperature of the water to the reactive power of the body. Great harm has been done to the hydropathic system, by ignorant and inexperienced persons, in plunging their patients indiscriminately into cold water. Priessnitz himself committed many serious mistakes by adhering blindly to the use of entirely cold baths. But, within the past ten years, a very great and useful change has been wrought both in Europe and in this country. In this respect, none of our best institutions are now without an apparatus for heating water, and baths at all temperatures are given, from cold to hot, as often hot as cold, and, as a result of this modification, we are able to show, in our annual reports, a much larger per centage of cures than was formerly exhibited in the days of primitive water cure.

CHAPTER XV.

SPECIAL MEDICAL APPLICATIONS IN SCROFULA.

In the first group or family of maladies we place scrofula. We give it this prominent place because it is a very large family. We include in this group all those forms of disease which depend upon, or have their origin in, a depraved or vitiated state of the fluids, either from some hereditary taint, or bad habits of the individual. This is a fearful group of diseases, it embraces not only some of the simpler forms but also those serious kinds, as consumption, rheumatism, mirasmus, tumors, white swellings and tubercles in various parts of the body; and is frequently the cause of the fatal termination of many of those complaints which are very simple in themselves.

In constitutions where taints of this disease are discovered a rational course of treatment should at once be adopted to remove it. If a proper course of medical treatment be pursued, very great improvements can be made, even if an entire cure can not be effected. The disease can be held in abeyance, and the patient made to enjoy comfortable health, and frequently life can be continued to good old age. But when it has so undermined the constitution as to develop fully some of those fearful forms of disease, as consumption, white swellings, cancers, &c., then all that can be done is to smooth the way down to the grave. We urge parents to study and ascertain the condition of their children, and lose no time in the use of those means which reason and experience, and the united testimony of medical men have for a long time recommended as useful;

and then other means which later experience has demonstrated to be valuable agents in restoration. We refer to the hygienic treatment prescribed by physicians generally, and to the water cure. They are the only rational practical means for the removing of these terrible forms of disease. We urge every one to attend to this disease in its incipient stage. We say again, if this be done, it can be almost certainly removed or stayed. Tubercles need not be developed into ulcers, enlargement of the glands may be prevented from becoming abscesses. It is much easier to prevent than to cure.

CAUSES.—The remote causes which tend to produce scrofula may not be easily detected. It is generally conceded to be a hereditary disease, transmitted from parents to children. Where it is known to exist in parents it sometimes is not seen in their children, but will appear in the next generation and often with increased malignity. It is often a mystery why it should thus pass over one generation, to appear in the next. Probably this could be explained if the habits of the individuals were consulted. The manifestations of the disease often stimulate people to great care in their habits of living, &c. This care always meets with a favorable response in nature. As though God who is the author of nature's laws would say, "if ye will forsake your sins the curse shall be removed." But, as the improvement takes place, the subjects grow careless and return again to their bad habits of living, when the evil returns upon them. The second attack is worse than the first. If then there is no change in the habits, and sanitary measures are not vigorously pursued, after three or four generations the family becomes entirely extinct. We do not suppose that these people are more wicked than others because they suffer such things, but in the violation of certain physical laws, such is the penalty which infinite wisdom has seen

fit to affix. There is an awful disease, resulting from violating the laws of the organs of generation, known as syphilis, which degenerates into a scrofulous condition, and may pass through several generations. This disease will be removed in time, if right habits are adopted and vigorous sanitary measures enforced, otherwise it develops consumption, spinal disease, cancer, or abscesses, and destroys those afflicted with it.

Proximate and exciting causes of scrofula may be found in the habits of families in respect to their diet, ventilation, cleanliness, &c. The free use of swine's flesh, especially during the hot seasons of the year and in warm climates, can not be favorable to a pure state of the fluids. The eating of a large quantity of sweetmeats, superfine flour, butter and rich gravies, producing obstinate constipation of the bowels and general torpidity of the glands, must produce impurities. Some cutaneous eruptions which, for the want of proper cleanliness, are allowed to spread over the skin, and then often repelled by improper ointments, become the source of lasting and serious disturbances of internal organs, which appear to be of a scrofulous character. Suppressed eruptions, like scarlet fever and measles, often degenerate into scrofula, causing a great amount of suffering, and ending, after several years, in death by consumption, or some other disease.

The taking of poisonous drugs for medicines, like mercury and arsenic, often deranges the glandular system, leaving a taint which to all intents and purposes may be called scrofulous. In referring to these few causes of scrofula, we do not pretend to exhaust the subject, but leave it open to the inspection of intelligent minds, who may be able to discover many other agencies which tend to corrupt the fluids and produce some form of this disease.

TREATMENT.—As this disease consists in a weak-

ened state of the vital principle, consequent upon a vitiated state of the fluids, the course of treatment must be apparent, which will be to purify the fluids and strengthen the vital principle. This is done chiefly, if not solely, by a judicious course of *diet*, *exercise* and *bathing*. The taking of many medicines is usually of very little account. There are some medicines which are *decidedly* injurious. Any medicines, to operate favorably, must be in harmony with the laws of life, either in supplying the system with proper elements of nutrition, or gently stimulating the glands so as to produce a cleansing or purifying effect. Some such effect may be produced by syrups, or decoctions of simple roots, &c., as sarsaparilla, dock and some others. Some mineral waters, also, furnish the system with the elements required for nutrition, and stimulate the glands to throw off impure substances. The spring waters of Saratoga, and similar waters, have a purifying effect in many cases. The use of both medicines and mineral waters should be varied as the cases may demand, avoiding every thing which in any wise weakens the vital powers.

DIET.—The diet in scrofulous cases should be nourishing, but free from pungent stimulants. Lean beef, mutton and fowl may be used once or twice per day, with stale bread, vegetables, and a small quantity of fruits. The meals should be taken at regular intervals, and hot rolls, pastry, and spices should be avoided. Alcoholic drinks and tobacco are entirely proscribed.

EXERCISE.—This should be taken in a systematic way. The training, as practiced in most of our water cure gymnasiums, is of the utmost importance in developing the muscles, and in producing those changes in the cellular structure upon which life and health depend. Out-of-door exercise, should be taken, such as walking and riding, in addition to the regular gymnastic exercise.

BATHING.—This part of the curative means should never be neglected. Baths should be carefully regulated, and taken so as to produce a free circulation, bringing the vital action upon the skin, and sustaining this action until the internal organs are relieved, and the depurative process, by the skin, made as perfect as possible.

The greatest mistakes are made here, by prescribing too cold, and too long baths. If the bath be cold or hot, it should be short. Often a hot bath of five minutes will be found very serviceable even when the cold can not be borne. The short hot and cold bath alternated work well; but either, if prolonged, injures the system. The cold makes too heavy a draft upon the calorific functions; while the warm produces too much relaxation. We can not give definite directions to apply to the various forms of this disease under this head, but in general we say, let every process of bathing be performed with two objects in view; the cleansing of the system from vitiated fluids, and the strengthening of the vital principle. Parents who have scrofulous children, instead of confining them to study in early years, should seek first to develop their physical systems. For this purpose, they should either learn the hygienic processes of the water cure, so as to practice them upon their children, or send them to some good water cure establishment, until they acquire habits of exercise and diet, which would secure to them, in most cases, lasting health. One year's training, in a good water cure establishment, would be of greater utility to scrofulous children, both mentally and physically, than the same time spent in our best schools.

TUBERCULAR CONSUMPTION.

The most curious as well as most important peculiarity of scrofula, is the formation in the various organs of the body of what are called tubercules.

These tubercules are little masses of unorganized substance, somewhat resembling curd or new cheese, varying in shape and size, and deposited upon the organs from the blood. They are sometimes round or cylindrical, and sometimes shaped irregularly. They are little specks or morsels, scattered generally upon the surfaces of the membranes, or deposited in the little interspaces which abound in all the living tissues. Says Dr. Johnson, "When one of these morsels has been deposited, it gradually becomes larger and larger by the continual deposition of more tubercular matter upon it. They thus frequently acquire quite a large size." It is very easy to see how a number of these tubercules, even of the smallest size, when existing among the tissues of any of the organs, will produce irritation and inflammation by their presence, and interfere greatly with the functions of the organs in which they are situated, by the space they occupy. There is no part of the body that may not be infested by them. Where there is a marked scrofulous or tubercular state of the system in parents, the children may have them before birth. They are not deposited by inflammation, but seem to be the result of a vitiated or depraved state of the fluids. After becoming quite large, or even when small, if some depressing influence acts upon the vital principle, like exposures to cold or fatigue, or anxiety and watching, these tubercules become inflamed and soften. In this case we have an ulcer, which, if on or near the surface, discharges a cream-like matter. If in the lungs, the discharge produces a cough, which expectorates the matter from the lungs. When this takes place, we

have established *phthisis pulmonalis* or tubercular consumption.

Symptoms.—It is unnecessary to give a minute description of the symptoms of this disease, they being generally well known in this country. Among the most prominent are the cough, shortness of breath, expectoration of a cream-like substance, often streaked with blood, spitting of blood; great wasting of the body; hectic fever, hoarseness, loss of voice and diarrhea. Some of these symptoms are not peculiar to tubercular consumption. But when we find several of these existing at the same time, we have great reason to fear that the disease has made fearful inroads upon the constitution. It is of the utmost importance to attend to its first symptoms, as the incipient or forming stage is the time for medical treatment; and at this time, if ever, we may hope to stay the ravages of this fell destroyer. These incipient symptoms of consumption are not particularly marked; usually all that we can know is, that there is a debilitated state, flat narrow chest, pallid or flushed face, deep red or purple lips, inclination to cough when taking cold, cold hands and feet, constipation, pain in the side, and frequent pulse. With more or less of these symptoms present, it becomes necessary to take immediate steps, to invigorate and fortify the constitution.

Causes.—The remote cause is the scrofulous condition of the patient. The proximate or exciting causes are, colds, exposures, improper food, sleeping in cold damp beds, dressing the feet and chest too thinly, breathing dust, watching, and sympathy with those who have the disease, too free use of vinegar, and the want of nourishing food.

Treatment.—Measures should be taken to restore tone and vigor to the system by nourishing diet, exercise and bathing, as directed under scrofula.

In connection with this there should be special attention to the lungs, in endeavoring to enlarge them by simple inhalation. I have known persons with small lungs, by a systematic course of inhaling, increase the circumference of the chest from three to six inches in a few months. An instrument for this purpose made of silver, about three inches long with a valve so as to cause a pressure on the chest in exhaling, is the best. Use this three or four times a day, for ten or fifteen minutes each time. Breathing through this tube deeply and slowly brings the lungs into general action, and is very serviceable in strengthening weak lungs. If there is much soreness about the membrane of the lungs, use the medicated inhaler. This is made of tin or glass with a pipe, by means of which the air can be drawn through medicated water and into the lungs. It requires a suitable article for this inhaling, but it can be easily arranged. There is a variety of them in use. The best medicated inhalants are prepared from the White pine, Balsam fir, and Balsam tolu. We sometimes use other simple articles (see recipes). This inhalation can be used several times a day for ten to twenty minutes at a time. It is a good exercise for the lungs, serving to enlarge them, allay irritation, and strengthen at the same time. In addition to this use the water baths, according to the condition of the patient, using tepid or hot baths, seldom or never cold ones. The hot fomentation used two or three times a week for thirty to forty minutes (see directions), the patient either in bed, or with his feet in hot water sitting with blankets about him in a chair, followed by a dripping sheet at 80° or 90° F., with thorough friction for two or three minutes, is of great service, in restoring free circulation to the blood in the chest. This should be taken, at the time of day, when there is the greatest depression or tendency to a chill. The

dripping sheet, half bath, or pail dash of a temperature about 80° F., is very useful when first rising in the morning, followed by thorough friction or buffatine. Friction also may be employed with great advantage without the baths. The buffatine can be used three or four times per day with gentle percussion over the parts of the body where there is the least action. It is of great service in restoring circulation through the tissues and causing those changes which are so beneficial to health. Great care should be taken to secure a proper amount of daily exercise in the open air; to protect the body by warm clothing in cool or cold weather; to have a nourishing diet, abstaining from tobacco, coffee and tea, and that the mind is not overtaxed, either by study or business. This is the general course in incipient consumption, and and has succeeded almost invariably in arresting the disease. When the disease is fully developed, we have the chills, fever and night sweats, with large expectorations of pus, and frequent spitting of blood or hemorrhages, with an irritating cough, pain in the side, and other symptoms of the disease, this course of treatment, modified according to the circumstances of the case, is the best to arrest its progress, and to give relief to the patient. We do not say it will cure in any case, but we say, that we have treated a number of cases that were considered hopeless, in this way, and they are still living, and some of them fully restored. No physician can positively tell when the disease is incurable. Some important cases pronounced by eminent physicians as hopeless have been entirely restored, others have had their lives prolonged, in all human probability, for some years or months longer than they would have lived had it not been for the treatment. Some of these have also enjoyed comfortable health. We say then, to the consumptive, depend chiefly upon the bathing, the inhaling and the exercise. We also,

in some cases, use a syrup made from pine, cherry, &c. (see recipe); also the phosphate of lime (see recipe); these may be taken freely, and as expectorants and nutriments for the lungs should be used with discretion. We say again of this complaint, it is more easily prevented than cured. Deal thoroughly with the first symptoms, and there will generally be found a happy relief.

KING'S EVIL.

This is a scrofulous enlargement of the glands of the neck. They grow sometimes very large before they inflame and suppurate. They are generally under the ears on one or both sides. They are very painful swellings, and form very offensive ulcers. They are very difficult to heal, and often end in consumption.

CAUSE.—It is evidently a tubercular disease, having its origin in the scrofulous state of the system. The lymphatic glands, becoming weak, lymph is disposed to collect in them and harden, as in other places, into a cheese-like substance, until they obtain a large size; and then they soften or suppurate, forming these fetid ulcers. The proximate cause is generally cold, taken by exposure to rain, or by wet feet, so that the whole body becomes chilled. The same causes which would produce tubercular consumption, will produce this disease. It is consumption, only the tubercules are in the neck, instead of being on the lungs.

TREATMENT.—In the first stages of the disease, before the tumors are much enlarged, it requires thorough sweating and drinking freely of hot water so as to secure a free dilution and circulation of the lymph and not to allow it to accumulate in the glands. This sweating may be by the fomentations once a day, followed by a dripping sheet at 75° to 80°

F., or by the dry blanket pack for one or two hours. The hot compress should be worn on the neck well covered with dry cloths or oiled silk most of the time. Electricity also may be used to a good advantage, by applying a light current to the tumors, placing the feet in hot water with the negative pole in it, and passing the positive pole over the tumors for twenty minutes once or twice per day. This will often dissolve the lymph and carry it through the glands. Remember that these things are to be done in the first stages of the disease, and persevered in until the glands are reduced to a natural size. Then that treatment should be pursued which is recommended for scrofula, until the system is entirely relieved. After the glands have become so large and so hard that the hardened lymph can be removed only by suppuration, then there must be a modified course pursued, similar to the treatment of consumption and scrofula. The scrofulous syrup can be used (see recipe), and the general means for cleansing and restoring the system.

SALT RHEUM.

This variety of scrofulous disease is not considered so dangerous to life, especially while it remains on the surface of the body. It generally appears on the hands and arms or legs, and sometimes covers nearly the whole surface of the body. It is a rough scaly eruption attended often with intolerable itching or burning, and, when irritated, a salt watery matter oozes out of the skin. There are several peculiarities of this form of disease which it is unnecessary to distinguish, as in treatment there seems to be no special attention necessary to meet these varieties.

CAUSE.—The remote cause is to be found in a vitiated or depraved state of the fluids of the body,

depending upon a scrofulous diathesis. The direct or exciting cause is often traced to colds, salt food, and various medicines which may tend to throw these humors upon the surface of the body. Often under water treatment, in scrofulous and consumptive cases, this salt rheum appears on the surface, and is always hailed as a favorable symptom; it is considered important to retain it upon the surface, until the whole internal organs are cleansed; when the same course of treatment which produces that humor will remove or heal it.

TREATMENT.—This should always be of a kind calculated to keep all such humors on the surface of the body. The greatest evils often arise from repelling these eruptions by ointments which tend to dry up the skin and prevent the escape of the humors; mercurials, sulphur, and lead ointments, will often do this. The wet sheet packing, once or twice per day, in a warm sheet, from one to two hours, followed by a pail dash or dripping sheet or sponge bath at 70° to 75° F. is of great utility. The warm half bath at 98° to 104° for eight to twelve minutes can be used two or three times per week. The hip bath at 75° to 85° F. twenty minutes once a day works well. The hot hip bath at 106° F. for fifteen minutes, followed by a pail dash or dripping sheet, alternated daily with the cool hip bath, has effected favorable changes. Sometimes under this treatment, the patient seems worse, the eruptions are more troublesome, and those unaccustomed to the nature of the disease are discouraged; while in truth it is only on account of the disease showing itself more on the surface. If the same treatment is continued the patient will recover. There is no treatment which can be compared with that of water for curing this troublesome kind of scrofula; and it sometimes requires even a year or more to effect it. However, some badly appearing cases are

removed in three or four weeks. These are the extremes; and the time for cure must necessarily be in accordance with the obstinacy of the disease. No one can determine accurately from the external appearance of the disease, the time necessary for a cure. Some cases, which are very bad externally, show the disease at once in its worst aspect; others, that externally appear very slight, under the treatment begin at once to develop a more serious form, and, finally, will require a much longer time to cure, than those which appear much worse in the commencement. The repelling of this disease from the surface by ointments, often produces consumption, liver complaints, dyspepsia, mirasmus, &c. While curing this form of scrofula by the water treatment, demonstrates the curative influences of water in scrofula.

One variety of the disease called scald head in children, deserves a passing notice. Not that we need give any new directions for the treatment, except to say that, as children often feel the restraint of the wet sheet pack, and worry so much that mothers yield to their wishes and neglect the treatment needed to cure; in those cases, we advise taking the time for packing when they are disposed to sleep; then put them into a warm, or cool wet sheet, and by its soothing influence they usually drop off immediately into sleep, in which they will quietly repose for an hour or a little more, when they can be taken out, and washed thoroughly in water at 80° to 95° F., with remarkable benefit. Generally a few applications will serve to remove the disease. The head can be washed daily in castile soap and water, for cleanliness. Children that are treated properly become often much attached to the treatment. There is no necessity in ordinary cases for causing them to dread the treatment by shocking them with *cold* water. An ointment made

of the green of elder (see recipe) will sometimes facilitate the cure without appearing to do harm. It can be used at night, covering the sore part with soft linen or cotton; but, when this ointment is used, the water treatment should not be neglected.

The diet with this disease, as with the whole group of the scrofulous, should be nourishing, avoiding rich gravies, pastry, salt, and condiments.

ERYSIPELAS, OR ST. ANTHONY'S FIRE.

This variety of scrofula has some peculiarities which distinguish it from all others. One of these is its approximation to contagious diseases. It is often epidemic, prevailing extensively in some neighborhoods or districts. It has the appearance of scrofula in the vitiated state of the fluids. Its rapid propagation would favor contagion; yet, persons who have no constitutional taint, are seldom affected by it, even while it prevails the most, unless they become inoculated by absolute contact with those laboring under the disease. It frequently attacks individuals without any known cause. There is also in the attack more of the symptoms of acute disease than in scrofulous attacks usually; such as shiverings, debility and feverishness. The pulse is accelerated, and frequently nausea, vomiting, and diarrhea, present themselves, before there is any affection of the skin. When the face is affected a sore throat is an invariable accompaniment. After a short continuance of these symptoms, if the face be the part attacked, the skin on some prominent part, as the cheek bone, tip of the ear, or nose, begins to feel hot, tingle, and turn red. It becomes much swollen and soon begins to spread. All the parts in the vicinity become implicated in the swelling, which often increases to an enormous size, and the features lose all their natural resemblance. The disease, in

its malignant form is truly frightful; it is very rapid in its progress, and often terminates fatally in a very few days.

CAUSES.—The remote or predisposing causes are no doubt of a scrofulous character, being a general depraved state of the fluids, debility, and visceral derangement.

The exciting causes are generally found in some cut, or bruise, or scratch; in ulcers, or poisons; in infection, or contagion, or that state of the atmosphere which gives the disease its epidemic character.

TREATMENT.—The disease, being rapid in its progress, requires prompt and energetic treatment. The first symptoms of chilliness and nausea, should be met by the application of the hot fomentations and the drinking of hot water freely. The hot fomentations should be applied over the great nervous centers which are in the region of the stomach. These should be applied until the chill is entirely removed and a free perspiration produced. If vomiting takes place, it should be relieved by the drinking of hot water till the nausea ceases. The drinking of the water must be very free, not simply warm, but as warm as can be conveniently taken. Also enemas of very warm water should be used freely. If the force of the disease be broken, there will be but little difficulty afterwards. When the swelling begins it must be promptly met to prevent its spreading. The danger from the disease depends upon the amount of surface and the importance of the organ affected. How shall this inflammatory swelling be met? The cold applications of water do not seem to stop the progress of the disease, although they lessen the suffering of the patient. There seems to be a malignant virus which must be neutralized. It belongs to chemical surgery to destroy this virus. Among the remedies recommended we find the nitrate of silver, two drachms to

one ounce of water. It should be applied to the inflamed surface by a soft sponge tied to a stick, and used once or even twice a day in the first stages of the disease. Let it be applied very carefully over the whole surface, even to a quarter of an inch beyond the inflamed part. The solution should be kept in the dark, covered with paper, as exposure to light changes the nature of the medicine.

A better preparation may be made, we think, from the chloride of lime, about one half ounce in a quart of soft water, more or less, depending upon the sensitiveness of the patient. This should not be used strong enough to irritate the skin. This solution can be used by saturating pieces of soft linen and applying them directly to the inflamed parts, one or two thicknesses, changing them every half hour or hour. This solution has always, with us, been sufficient to arrest the swelling, and stop the progress of the disease. It is much more simple and harmless than nitrate of silver. Still the silver may be used without any evil results.

Rye or wheat flour is also recommended; sprinkling it freely on the inflamed surface. If the attack be sudden, after the vomiting with hot water, it may be well to use a medicine to open the bowels. We must be careful to use no drastic purges, but a dandelion pill (see recipe) can be used with safety and often with decided advantage for cleansing the primæ viæ or first passages. After the swellings have subsided, then great pains should be taken to eradicate this virus entirely from the system by wet sheet packing once a day, for one hour, followed by the sponge bath or dripping sheet, temp. 80° F. for two minutes.

There are other varieties of erysipelas, but as we have described the most malignant it is not necessary to particularize the others. The treatment of the different varieties will be found sufficiently ex-

plicit, under *Salt Rheum* and *Scrofula.* The diet should be very spare in all acute forms of this disease. The patient should be kept quiet and in a dark though well ventilated room. If attended by delirium, as is sometimes the case, cold applications must be made to the head, either with ice or snow, and at the same time hot cloths applied over the region of the stomach and to the lower extremities until the excitement is relieved. A tea made from the flowers of sweet elder, is very useful to keep the bowels open and to cool the blood. There are various other things which may be done to quiet the patient and to keep the circulation equal, which any good nurse will understand.

RHEUMATISM.

There are two or three varieties of this disease which will be treated separately. The variety which belongs to the scrofulous, is a very common one, and one of the most difficult to cure. It is frequently called chronic rheumatism, or rheumatic gout; not because of its long standing, as the term implies, but for the reason that the joints begin to enlarge and grow tender, sometimes with acute pain, and sometimes without, in its first stages. There is evidently a deposit of hardened lymph or chalk in the joints which render them stiff and almost immovable. It passes from one joint to another, sometimes abating a little in the old joints when it attacks a new one. So it often continues until the patient is entirely crippled by the stiffness of the joints and the contraction of the limbs.

Causes.—The origin of this disease is frequently found in the scrofulous diathesis of the system. A depraved state of the fluids leads to these chalky or tubercular deposits. The exciting cause is usually traced to exposures in damp and cold situations,

sudden colds, great fatigue, intemperance in eating or drinking, &c.

TREATMENT should be very similar to that which we recommend in scrofula.

The exercise should be free and in the open air, but not carried to great exhaustion or fatigue. Still it is useless to exercise while the system is loaded with these morbid substances unless other means are used at the same time to cleanse the system.

THE DIET should be sufficiently nourishing, consisting of a large proportion of acid fruits and vegetables, with but a small proportion of animal food and wheat bread. Acid fruits are very suitable food. Salt and salt meats should be avoided. The object we have in view is to prevent the formation of these tubercles or chalky deposits. That our food has much to do with them there can be no doubt, and therefore we prescribe a diet which will leave the system as free as possible. The drinks also should be carefully selected. Pure soft water is the best. Distilled water, or rain water, used freely and constantly has sometimes been very efficacious in removing the disease without any other means. Alcoholic drinks, beer, wine, cider, tea and coffee, should not be used. Green tea is an astringent and dries the fluids too much; coffee thickens the blood, and all the beverages containing alcohol serve also to stimulate and make the fluids thick and adhesive.

BATHS.—We generally prescribe baths to produce free perspiration or sweating once a day or three or four times a week, either by the vapor, dry blanket pack, fomentation, or hot hip bath. Free sweating and drinking freely of either pure water or the Congress or Empire waters of Saratoga have worked favorably. We usually prescribe from two to four baths a day. One sweating bath, the others tepid from 70° to 85° F., the hip bath about 20 minutes, the half bath two minutes, foot bath ten minutes. The

wet girdle is of importance worn over the stomach and liver, well covered and changed two or three times a day. In these chronic forms of disease we prescribe only on general principles. The invalid will usually do much better at some good water cure institution, staying, at least, until he obtains a clear idea of his own case and of the best course of treatment. He must have resolution to deny himself, and to persevere in a proper course, or all will be in vain. These cases can be usually treated successfully in the first stages by perseverance. Even when far advanced some cases may be restored. Electricity applied every day, or every other day, is of great service. The electro chemical bath will sometimes restore when other means fail.

RICKETS.

This disease of the spine seems to partake of the scrofulous character. Rickets require more bathing in cold water and more lime in the food. The bones are usually soft. The cracked wheat or coarse bread with lean meat and milk or eggs are suitable food.

TREATMENT.—If a child, the patient should be dipped in cold water suddenly, and then taken and wrapped in dry blankets until there is free perspiration, then washed in water at 80° quickly, with much dry friction. The early morning is the best time for this bath.

There are various other scrofulous affections such as hip disease, white swellings, lumbar abscess, &c., which require a careful treatment. But the treatment must be conducted so much upon general principles that it is unnecessary to give definite directions unless there should be some peculiarities in the case. The fomentations, hot hip baths, tepid hip baths, and wet sheet packing, as directed under *Scrofula*, must be followed with perseverance and

discretion. Good nourishing food must be furnished and the patient encouraged to spend much of his time in the open air. The use of strong medicines, alcoholic drinks, beer, &c., are to be discountenanced. Whatever the patients may seem to gain by these stimulants, they lose, ultimately, by the feeding of the disease or increasing still more the morbid matter in the system.

Much more might be written upon this subject, but enough has been said to enable the reader to understand something of the nature of scrofulous affections. Perhaps we have said enough also upon it as a *distinct* subject, yet in its secret influences it will be traced to many other forms of disease, which naturally come under other heads, and for the symptoms of which prescriptions will be given without any particular reference to their origin. And here lies the great beauty and utility of the treatment recommended. It is applied with equal success to the different forms of disease even though the cause should not be precisely understood. If the directions be followed there can scarcely be a failure of good results.

CHAPTER XVI.

PULMONARY DISEASES.

Consumption, Inflammation, Congestion, Catarrh, Bronchitis, Croup, Asthma, Pleurisy.

This family or group present some of the most formidable difficulties with which the physician has to contend. Some of them are considered as entirely incurable. Medicines have usually proved ineffectual. Although new medicines are continually being advertised as "sure cure," yet the disease rages with its wonted or increased fatality, in spite of the physician, or his remedies. We hope to show a more rational way for the treatment of these difficulties, one which has usually proved successful even beyond our most sanguine expectations. The treatment is for the most part simple, and such that, in the first stages, any good nurse can apply. The invalid himself, with some assistance, may direct his own treatment and save a great amount of suffering and expense. Parents who generally have the best opportunities for detecting the first symptoms of disease have their remedy at hand, and may save themselves from trouble and peril. We shall endeavor to give specific and practical directions such as may be followed with safety and advantage.

CONSUMPTION.

This formidable disease of the lungs partakes of two distinct characteristics which it is proper to treat under two distinct heads. We have already given the symptoms and treatment of tubercular or scrofulous consumption, which is one form of this

disease. There is another form, which may be called inflammatory or catarrhal consumption which may sometimes partake of the scrofulous, but is often induced by colds, atmospheric changes, exposure in damp places, and working among machinery where some mineral dust is inhaled. There are also other causes which produce this form of disease.

SYMPTOMS.—These are often quite similar to those of tubercular consumption, but there is generally more cough, freer and more copious expectoration, less wasting or emaciation, and less inclination to hemorrhage. It often is the sequel of inflammation or congestions of the lungs, or of a protracted cold, or influenza. The patient partly recovering from a cold or inflammation, is left with a cough, not particularly troublesome, but before he entirely recovers, a fresh cold is taken, and so the disease slowly progresses until we find all the symptoms of consumption, and under which the patient is slowly but surely sinking.

TREATMENT.—This form of consumption is more easily cured than the scrofulous; but if left until the last stages there is no cure. Therefore it is important that invalids should understand the dangers awaiting them by neglecting colds and coughs which might *seem* to be of little importance.

A cold is usually produced by checking perspiration. The action of the skin is partially suspended, and the watery matter which usually escapes through the skin is thrown in upon the mucous surfaces; producing influenzas or common colds. Every person should understand that, in health, more than one-half of all the waste of the body (which is two pounds or more in a day) passes off by insensible perspiration. Therefore the importance of keeping the skin in a healthy state. In case of a cold the first work is to restore the natural secretions of the skin. This is done by raising the ani-

mal heat sufficiently to produce free perspiration. The means to be used are the hot fomentations, hot hip baths, hot foot baths, or the packing in hot wet sheet or dry blankets; or, sometimes simply applying more clothing at night, and using hot water in a bottle at the feet and lying in bed later than usual in the morning, well covered, and drinking freely of either hot or cold water. It requires a little common sense to make these applications; but, if a person understands what he needs, his own genius can devise means to secure it. The great difficulty with most people is that they do not understand just what they need, and then any directions given usually prove a failure. When we say restore the action to the skin we do not mean that you are to apply hot cloths or make any hot application so as to merely start a perspiration and then wash off in tepid or cold water and think the work is completed. The action is frequently not so easily restored. It requires time. Sometimes it is impossible to do it by one, two, or even three applications. You should do what you can and keep every point you gain, and then try again. We have known persons entirely discouraged because they did not break up a cold by the first application, and then abandon the right treatment and resort to that which was decidedly injurious. We say again, understand what you wish to do and the means of doing it, then persevere until you succeed, whether it is done by one application or twenty. Parents often let their children go with colds week after week, annoying them with coughs, &c., which might very easily be cured if they would adopt the right course. Meet, then, these first symptoms and restore a healthy action to the skin and these coughs and consumptions will not trouble you. Understand, then, there *must be healthy action upon the skin.* This is usually secured by warmth and moisture applied to the skin until there is a free action. Then the

body should be carefully sponged or rubbed with a dripping sheet at a moderate temperature, 80° F., then with dry friction with the hand or towel until the skin is in a glow. The person may then dress warm or retire to bed for a time until the whole system has become calm and the circulation easy and free. If after a few hours the symptoms remain the same, or are only partially mitigated, the same or a similar process may be repeated. The patient need not be rendered particularly uncomfortable by this process; indeed it is often regarded as a luxury, the patient may have fresh air and good pure water, either cold or hot, with cold applications on the head.

When persons are laboring under colds and influenzas, the better way is, generally, to avoid exposures and keep the body in a warm state for two or three days. Feeble persons require more care than the robust and vigorous. We do not suppose there is any necessity of being frightened at every slight cold; but we wish to have persons awake to their true interests and real dangers. If a cold continue any length of time, whether it be slight or severe, measures should be taken to remove it and restore the system to its natural tone. This can be done with the means we have recommended. So much for the first and most common symptoms of consumption. Prevention is better than cure. After the disease becomes fully developed and there are chills and fever, night sweats and large expectorations with or without a cough, then we may fear but should not be discouraged. Several severe cases have been cured, even when they were supposed to be in the last stages. The treatment in such cases is to allay the irritation by removing the congestion from the lungs and restoring the natural secretions. The hot fomentation should be used once a day; the best time is when the chill is on or the system in a cold state; continue from 20 to 40 minutes with the feet in

hot water, or the patient in bed, with hot applications to the feet and the hot cloths over the chest and back. These should be changed or the tin fomenter used so as to keep up the heat until there is free perspiration, keeping the head cool. After there is free perspiration the dripping sheet should be quickly applied, not allowing the patient to be long exposed to the air, and rubbing thoroughly for one or two minutes, then use the dry sheet, warm, for two minutes, and after that the dry hand until the skin is brought into a glow if possible. If the patient be too weak to endure this he can be sponged off in bed and friction applied without much exposure. But if the patient be able to be up, he may be allowed in pleasant weather to go out and exercise freely after the bath, being careful not to be in a draft of air or to become chilled in any way. This bath is usually taken between ten and twelve o'clock A. M. At about three or four o'clock P. M. another bath can usually be taken advantageously; either the half bath or dripping sheet at about 85° F. is right, from one to two minutes, followed by thorough friction with the hand, and free exercise. The exercises which we have already described are very useful in all cases after bathing, and often much more convenient than walking or riding.

The chest wrapper is very useful to be worn at night. It should be well covered with cotton flannel or cotton batting. A dripping sheet should be used in the morning upon first rising, at the same temperature, with friction and exercise. This completes the day's treatment. It may be pursued thus every day, or a part of the treatment may be alternated daily. The fomentation in the A. M., and the dripping sheet in the P. M., may be used every other day, or either one may be omitted. Besides the water treatment both the simple and medicated inhalations are proper and efficient remedies. The simple inhaler

may be all that is needed. This should be used three or four times a day for ten or fifteen minutes at a time. When there is much irritation on the mucous membrane of the throat the medicated inhaler may be used for about the same length of time (for inhalants see recipes). Also where there is great wasting by expectorations we recommend the use of a pulmonary syrup (see recipe).

The food should be nourishing, avoiding spices, much salt, vinegar, rich gravies and fat meats. In cases of emaciation fat meats and butter may be useful, also sweet oil may be used to advantage. Where such articles are required they answer as well, and in some cases better, than cod liver oil. The phosphates of lime may be prepared and used (see recipe), and we believe, found as valuable as those imported from Paris. There is a variety of other means which may be used, but those mentioned we regard as equal if not superior to any others. Among the cases of consumption that have been treated with success, it may be well to refer to some few for the encouragement of those who are almost in despair. These cases show what may be done, and are convincing evidences of the efficacy of the treatment.

Suitable references will be given to any person by addressing the author at Saratoga Springs, N. Y.

CONGESTION OF THE LUNGS.

This form of disease is usually produced by some sudden exposure to cold after severe fatigue and sweating; drinking cold water while very warm and exhausted; sitting in a draft of air while warm, and other exposures.

SYMPTOMS.—Sharp pains in the chest; difficulty of breathing, sense of fullness in the region of the heart, pulse weak and small, surface pale and sometimes

covered with cold sweat, lips red or purple, extremities cold, tongue red and swollen, sensation of chilliness, &c.

TREATMENT.—This form of disease should be met promptly by a proper course of treatment, or serious mischief to the lungs will follow. If it be not speedily removed the lungs may become hepatized, i. e. hardened like the liver, and extensive ulcerations follow, which will be very difficult to heal. It is often the beginning of consumption. It is quite easily removed by using the hot fomentations over the chest and back, with the feet in hot water, as recommended in cases of consumption. Very few people are aware of the benefits to be derived from this course of treatment in congestion of the lungs. It is a rational and practical treatment. The difficulty consists in the lungs being filled with blood. All the vessels are distended and the functions of the lungs are partly suspended by the pressure. There is not, in the first stages, any lesion of the structure of the lungs. All that is required is to compel the blood to flow again to the extremities, or to invite it to the surface by relaxing the vessels, when the blood will leave the internal organs and flow as usual. Cases in which the patient could scarcely breathe, have been entirely relieved by this course in a very few hours. If the first application, which should be continued for one hour or more, should not succeed, then it should be repeated in the course of three or four hours, and a stimulating wash made from cayenne, mustard and vinegar applied to the surface, before the hot fomentation, will be useful if there should be difficulty in exciting action upon the skin. Blisters or pure mustard paste are commonly used. But these are very painful, and one serious objection to them is that they produce so much soreness on the skin as to prevent the further use of the hot fomentations. Unless the cure is

compieted the first time, the blisters are a damage. If the hot fomentations be properly applied in the first stages of the disease, a cure may be reasonably expected. If a cure be not made in the first stages it will demand afterwards the same treatment as consumption.

INFLAMMATION OF THE LUNGS (Pneumonia).

The cause of this form of pulmonary disease is very similar to that of congestion. In fact it may be considered as the second stage of congestion. In a few hours after the lungs have been filled with blood or congested, there usually takes place a reaction, which is styled lung fever or inflammation of the lungs. This may continue for many days and end in suppuration, or what is termed resolution. At first the cough is very troublesome, with scarcely any expectoration, or only of a thick tough mucous, which can hardly be expelled from the lips and tongue. In a short time the expectorations become more easy and the cough less harrassing. The mucous may be streaked with blood. This is not regarded as an unfavorable symptom. The breathing is freer, the pulse becomes soft and the fever abates, and the patient recovers. If this disease be promptly met, it usually requires but a few days to bring about full restoration. But if neglected, it often terminates in chronic inflammation of the lungs and consumption.

Treatment.—This should be nearly the same as in congestion. In the first stages of this lung fever there is usually a great sense of chilliness, with flashes of fever, which, while they last, should be met with thorough hot fomentations. After this chilly stage is fully passed, and the fever ensues, the patient having a strong desire for cold applica-

tions, they can be made to the chest and back by the compresses with great benefit. They should be applied with two or three thicknesses of linen well covered with cotton flannel, which may be changed once in a half hour or hour until the heat is reduced to the natural standard. But they must not be changed so as to produce chilliness. The patient will generally require the sponge bath twice a day in tepid water 85° F., with thorough friction to prevent a chill. Frequently, by applying the hot fomentation at night well covered with cotton flannel or cotton batting and letting it remain through the night, there will be found a decided improvement in the morning. This application can be made with great advantage to children. Quite severe cases are often entirely relieved by this applicalion in one night. Great care should be taken not to allow the patient to be exposed to cold air for several days, or until entirely restored; as there is much danger of a relapse. There are no forms of disease which more decidedly show the superior efficacy of the water treatment than those of congestion and inflammation of the lungs. The hot fomentations are to be applied thoroughly and perseveringly until the breathing becomes easy and the patient relieved. It will sometimes require three or four hours. But if there be no faintness or severe exhaustion, the applications should be continued, until relief be obtained. If there should be faintness there may be a suspension of the treatment, a short time, the patient being sponged in cool or cold water, to refresh him, when the hot applications can be again repeated.

CATARRH.

This form of disease has its origin in the upper part of the wind pipe and in the nasal organ. Perhaps we may say that it begins in the membrane of the nose, and from thence passes down following the membrane until it reaches the bronchial tubes. It usually receives its name from the parts affected. While confined to the nose it is called catarrh. When in the upper part of the throat it is termed thrachietis. When lower down it is called bronchitis. When it diffuses itself over the mucous surfaces of the lungs generally it is termed consumption. These are only different names for one and the same form of disease. In this article we shall deal with it only as situated in the nasal organ in the upper and back part of the nose.

This disease is caused usually by colds and influenza repelling the humors from the surface to the mucous membrane lining the nose.

SYMPTOMS.—In slight attacks there is simply a free discharge of a thin watery fluid attended with more or less of uneasiness in the nose and head. In severe attacks the discharge becomes very profuse, attended with burning and pain in the forehead and head, the discharge often becomes thick, of a yellow or green color, and sometimes bloody. It frequently drops down in the back part of the mouth and throat and is very offensive. By this it works its way on to the lungs, producing consumption, which has been already described. It is sometimes confined mostly to the head, causing the bones in the nose to decay.

TREATMENT.—In the first stages the same treatment which we prescribe for colds and influenzas. The object is to restore the action upon the skin and relieve the mucous membrane. This is effected by the hot fomentations, hot hip baths, and wet sheet

packing, followed in either case by a dripping sheet, pail dash, or sponge bath, at 75° to 80° F., with thorough friction. This may be followed every day with free perspiration until the disease is removed. Slight attacks will require usually from one to two weeks. In chronic catarrh, we direct, in addition to this treatment, the sniffing of pure water up the nose two or three times a day, for five minutes at a time, so as thoroughly to cleanse the membrane. The water may be quite warm or tepid, but never very cold. In severe cases, where the membrane is excoriated and there seems to be indolent ulcers, we use a weak solution of chloride of lime or chloride of sodium, so as to cleanse more effectually the membrane and dispose it to heal. Several bad cases have been cured by these applications added to the water treatment. These washes are used with a syringe prepared for the purpose, and applied from the throat upwards through the nostrils. In chronic catarrh the treatment must be followed for weeks and sometimes for months, varying, as the patient may require. It is sometimes almost as difficult to cure as consumption, though not considered so dangerous while confined to the head.

BRONCHITIS AND TRACHEITIS

These forms of disease resemble catarrh, and seem to be of nearly the same character. Bronchitis is low down in the throat. Tracheitis is located on the trachea. These are often called "the clergyman's sore throat." Being situated as they are, they interfere seriously with speaking and singing. Many public speakers, as well as clergymen, are almost entirely laid aside from their labors by these affections. They are usually produced by colds and aggravated by public speaking. The symptoms of these forms of disease are so marked that a particular

description is unnecessary. Soreness of the throat, hoarseness, and cough are the prominent symptoms.

TREATMENT.—This should be similar to that directed for catarrh and consumption. Cleanse the system from morbid matter by the fomentations, hip baths, and wet sheet packing. These must be continued until the difficulties are removed, gargling the throat with cold water several times a day, and wearing compresses at night. The inhaling, both simple and medicated, are very useful in many cases. Also the pulmonary syrup (see recipe) may be used with benefit. The food should be nourishing and simple. Coffee and tea should be discarded, so also tobacco and spirits. Free exercise in the open air and the gymnastic exercises as recommended in this book should be daily practiced. The swabbing of the throat with nitrate of silver, as is practiced by many eminent physicians, is of doubtful utility in most cases. Sometimes it may be beneficial. The chloride of lime, or chloride of sodium, answer better. Also a wash prepared from nitre, when the throat is much inflamed, does well. When the throat is in an indolent state, a gargle prepared from cayenne is good. Many very serious cases have been cured by using the above means. They are usually cured if not too far advanced.

CROUP.

This form of disease is located at the top of the windpipe. It tends to close up the pipe, preventing the air from passing into the lungs. The disease is mostly confined to childhood. It often proves fatal. Very fleshy children are most liable to it. The attacks are usually sudden, and it often becomes serious before medical aid can be called. The time of attack is generally in the night. Parents often retire at night with a feeling of security, to be

aroused at midnight, or a little after, by the deep, shrill cough of croup. Those who have lost children, or had them very sick by this disease, are usually effectually aroused by the first intimation. They spring from their beds and apply some remedy which they depend upon for cure, such as antimonial wine, syrup of ipecac, or tincture of lobelia, or squills. These nauseating medicines often vomit the child and palliate the symptoms. But they are not to be depended upon in severe cases for a cure. In this disease the water cure treatment has won lasting laurels. Its virtues are easily tested, and its efficacy fully demonstrated. One principal advantage is, that it is a remedy always at hand. Cold or hot water may be easily procured. Either one or the other may be used according to the indications. The disease is evidently the effects of colds and atmospheric changes. The over-feeding of children, and giving them too *rich* food, lay the foundation for it. During the damp and chilly weather of spring and autumn this disease is usually developed. It often comes on suddenly, but sometimes the symptoms are apparent several days before any danger is apprehended. Especially is this the case in what is termed membraneous croup; there is a slight inflammation upon the mucous membrane of the throat, causing a hoarse cough through the day and often in the night; but, being not very severe, parents and nurses are not alarmed until a false membrane, being formed inside the windpipe, threatens immediate suffocation. In these cases it is often past cure before any thing effectual is done. Physicians bleed, blister, give strong medicines, yet to no purpose. The membrane adheres closely and the child dies. Very few recover after the membrane is fully formed. The safe way is to prevent the formation. To do this the treatment must be applied in time to subdue the congestion and inflammation in the throat.

TREATMENT.—In the first stages the child should be kept entirely free from exposure, and should use either the hot fomentation over the throat and chest, producing free sweating, or the wet sheet pack, until the same result is effected. Then sponge or wash in water at 85° to 90°, with thorough friction. After the process of sweating, great pains should be taken to keep the child from exposure. The object is to establish a healthy action upon the skin. This will always relieve the mucous membrane. If you allow the child to become chilly, or be in a cold room after sweating, the action will return to the membrane and there will be an aggravation of the difficulty. If such should be the case, no time is to be lost in bringing back the action again to the skin. There is a variety of operations to effect this. We often use the tub bath; by taking a common wash tub and putting into it two or three pails of water about blood heat, then seating the child in this with a blanket over the shoulders wholly surrounding the tub and keeping out the air. After the child becomes a little accustomed to the water, in about two minutes, add carefully hot water raising the temperature to one hundred and six or even more by adding a little at a time. A careful nurse can manage this so as to please the child and have the water warm enough to produce free sweating. From eight to twelve minutes is generally sufficient. A cold cloth is ever to be kept on the head, and changed often, keeping the head cool. After a free sweating the child can be washed or poured with water at 80° and rubbed thoroughly. This should be done quickly, and the child again put in bed and covered warm with a hot bottle or fomenter at the feet. He should be kept in bed until there be a good action upon the skin. During all this process the child should drink freely of cold water; a little and often will do. In the treatment of any acute attack of disease,

great judgment should be used by the nurse, at all times. The remedy may be good and all-efficient, yet there may be a failure in the application. If parents and nurses were better instructed in the nature and principles of disease and remedies, there would be much less of sorrow, suffering and premature death. The cold compress can be used with great effect in many cases. This may be put on at night and well covered with flannel, or what is better cotton batting, excluding the air. It acts like a poultice, allaying irritation and quieting the nerves. Often this compress applied at night, will nearly remove every symptom of croup by morning. Then wash the child in tepid water and keep from exposure a few days and all is well. Children should be treated in this disease and in every other in a manner not to frighten them. There is no necessity of causing them to dread the remedy, either by using water too hot or too cold. If the application of water be not immediately pleasant to the child, if rightly managed he will soon experience such relief that, as a general thing, he will not object to the repetition. Some children are more difficult to treat, either with water or medicine than others. A careful nurse can make nearly any application of water to children that is required to cure any form of disease. The remedy is simple, safe and efficient.

ASTHMA.

This form of pulmonary disease resembles the croup, except it extends more generally over the mucous membrane lining the air cells.

SYMPTOMS.—Difficulty of breathing is the prominent symptom. The breathing is attended with a peculiar *rale* or rattle. It is generally accompanied by a hard cough. There are several varieties of this form of disease. The dry asthma where there is

little or no expectoration; the humid asthma, with free expectoration; the harvest asthma, the paroxysms of which generally come on in summer, &c. These different varieties do not call for any special change in the treatment.

TREATMENT.—Many severe cases of asthma have been cured by a persevering course of water treatment. The skin may be considered the principal organ affected, and therefore should receive special attention. The hot fomentations can be applied thoroughly in a severe paroxysm of asthma, giving frequently speedy relief. They should be placed upon the back as well as over the chest. These applications often give great ease to the sick one. They can be applied for one or two hours, then sponge the parts with tepid water or let the hot cloths remain well covered, even for hours, renewing them occasionally until permanent relief be obtained. The dripping sheet may be used when the patient is able to be up. During the intervals of the paroxysms, the patient should take the hip baths, and general water treatment. The fomentations over the chest and back are the means upon which we depend for relief in asthma. The inhaler is of service. Warm vapor of pure water is very soothing in dry asthma. The vapor from warm milk is recommended very highly. The oil of the angle worm or fish worm is very soothing and relaxing, and will often give very decided relief. Take of this, a teaspoonful two or three times a day. This can also be rubbed on to the outside with decided benefit (see recipe for preparing and using). The smoke of mullein may be used with benefit in asthma and other lung difficulties. The inhaler should be used three or four times a day for ten minutes at a time, with the tincture of pine, &c., as recommended for catarrh and consumption. To treat asthma successfully, we must give a healthy action to the skin by bathing and exercise, cleansing

the system from morbid humors, looking well to the diet, and seeing also that the nervous system is kept in proper tone by recreation and rest.

There are some other pulmonary difficulties which require special attention, but as they are of uncommon occurrence, we shall not treat of them in this book.

CHAPTER XVII.

CONTAGIOUS DISEASES.

Small Pox, Scarlet Fever, Measles, Typhus Fever, Whooping Cough, Malignant Sore Throat, Cholera.

This is far the most important group or family of diseases which we have to consider in relation to domestic treatment and remedies. Among this group we find more frequently the fatal effects of ignorance and procrastination. Parents and nurses let precious time be wasted by stupid delays, or render the disease more malignant by a wrong course of treatment. Physicians can not be always at hand, and even if they could, might not be able to effect relief. But in the present state of medical knowledge, we have often much to fear, even at the hands of the wisest physicians. These forms of disease often baffle the skill of the most eminent. Yes, so far do they fail, that many good and wise men have come to the conclusion, that all medical science is a sheer humbug. Even medical men themselves are discarding medicines in these complaints, and trusting more to the recuperative power of nature for a cure. What is the difficulty? It is doubtless because the nature of these complaints has not been well understood, or the indications of a cure have not been perceived or regarded. It must be evident to every discerning mind, that these forms of disease must be removed from the system, after a certain manner which nature herself must indicate or show. For instance, in small pox and scarlet fever, it is very clear that the morbid virus

which causes the disease passes off through the skin. Medical treatment should not interfere with nature's operations, but rather promote and facilitate them. All medical treatment, which would keep this virus in the system, must fail to be beneficial, and consequently hurtful. Thus we account for the frequent and unexpected failures of medical men in curing these forms of disease, because, their remedies serve rather to depress the vital action of the system and keep *in* the virus, than to strengthen and cleanse. The water cure treatment has achieved its greatest triumphs and won the lasting gratitude of mankind by the light which it has thrown upon the world, in the treatment of contagious diseases. It enters into the abode of affliction with no doubtful credentials. It calms fears and inspires hope as with a master's voice. It only needs to be understood to satisfy every candid mind that it is able to do all that has been promised in its behalf. The therapeutic action of water, must evidently consist in its allowing and promoting the free egress from the system of the deadly virus which causes the fatality of these diseases. What more harmless and more soothing than water in its various temperatures? How readily, when applied to the skin of a patient in a burning fever, does it allay the heat, and dilute the virus! *What a luxury* to use cold water as a beverage when under a raging fever! How eagerly is it quaffed! But if denied the patient, as is often the case under the drug treatment, how does it haunt him in his dreams, and all his wants seem to be concentrated in one, which is, "*cold water to drink!*" These are the pure instincts of our physical system, and there is no reason why they should not be gratified. If these instinctive wants are properly heeded, they are more to be relied upon than the medical prescriptions of the learned. There is, as a general thing, no necessity of violating our natural

instincts in the administration of water as a remedy. Many suppose it must be *cold water*, *ice* water, and such like applications, which frighten children and make adults shrink from its use; whereas, the applications may be of just such a temperature, as will be the most agreeable to the patient, and he still receive all the benefits which the use of water is designed to give. The healing is *not* in the temperature, nor in the shocks of cold which may be given, but in its having the power to rid the system from the morbid virus, which renders the organs unable to perform their functions. We wish to have this distinctly understood; for it is on this point the greatest mistakes have been made, and the greatest prejudices have been formed against the use of water. We say then, as a general rule, *apply it so as to meet the instinctive demands of the system.* If the patient be cold and chilly, he does not cry for or desire cold water externally; hot applications, in the form of fomentations, hot hip baths, or foot baths, the vapor, or the full hot bath, are grateful to the feelings. These may be used with judgment and skill; never allowing the patient to faint by continuing the bath too long, or by neglecting to give cold water to drink, or by not keeping cold water on the head. When the bath has been continued a sufficient time to arouse the vital energies so as to move the morbid matter in the system, then see that applications are made to cause it to pass off through the skin, or by lavements from the bowels, or by copious water drinking cleanse the stomach. All this can be done quietly and the patient made to feel that every application is grateful and beneficial. But we will give more specific directions under the different forms of contagieus diseases.

SMALL POX.

This variety of contagious disease is considered the most virulent and fatal of any other in this group or family. It seems to be propagated only by contagion. The presence of this peculiar virus only will produce a genuine case of small pox. But it propagates itself with great rapidity whenever this virus is present. Great care is necessary to prevent its spreading. Under the water treatment and a suitable diet and regimen, it seems to be disarmed in a great measure of its fatality. It becomes what is termed varioloid, and is comparatively harmless. Still the varioloid will propagate the genuine small pox, and must be treated in every respect, like it. Whenever this contagion is prevailing in any neighborhood all the hygienic means for prevention should be carefully observed, vaccination is supposed to be a preventive and should be practiced. No person can tell when he may be exposed. The virus is often conveyed to individuals through the air a long distance, or by clothing, or even letters sent by mail have communicated the disease. The diet should be confined to fruits and vegetables chiefly, avoiding salt, fat meats, and pastry. One bath a day will generally be sufficient. A person of a scrofulous diathesis should be much more particular than persons who are free from morbid humors.

Symptoms.—In from ten days to two weeks after exposure the disease commences with chilliness and fever, dryness of the skin, hard and frequent pulse, loss of appetite and pain in the stomach, pain in the head and very severe pain in the back and loins. Often nausea and vomiting, aching of all the bones, soreness of the flesh, sometimes dizziness, convulsions, and delirium. This is termed the first stage.

The eruption commences on the face on the third or fourth day in the form of red points, which gradu-

ally increase and enlarge and spread over the whole body. In their complete development they attain the size of a small pea, and are filled with a yellowish fluid, which gradually changes in its color until it assumes a turbid appearance, and each pustule is surrounded by a red circle, and has on its top a dark indentation. The eruption is full on some parts of the body when it is only making its appearance on others. This is the eruptive and suppurative or second stage. The third stage, consists in the drying up of the pustules and in the removing of the scales or scabs from the skin. At this stage the fever has subsided, and the patient is considered free from danger. Some writers divide the disease into four stages. But the above is all that is necessary for practical medication. The severity of the disease is generally over in from ten to fifteen days. In healing the pustules it is very desirable to prevent the pitting. This is dreaded by many more than the disease itself. This can usually be done by keeping the face covered by soft wet linen, preventing the light from coming to the face.

Another peculiarity mentioned in medical books, the disease is termed *distinct small pox*, when the pustules are isolated, and *confluent*, when the pustules run into each other. The latter variety is regarded as the most severe, and is of longer duration.

TREATMENT.—This is to be modified and changed according to the stage of the disease. In the first stage no one can tell positively that it will be small pox. But as all the contagious diseases have symptoms which are very similar during the first stages, they may all receive similar treatment.

Then in the first stage, when there are chills and fever, aching in the bones and head, the hot fomentation should be used until the chills are removed and the pains subdued (see fomentations). They must be thoroughly applied, keeping the head cool

by cold cloths frequently changed, and the feet warm by a hot foot bath or hot applications made to the feet in bed. The tepid or warm sponge bath can be used two or three times a day at intervals of several hours, letting the patient have a little rest after them. But if the pains return or be not abated, the hot fomentations should be repeated. Generally thorough applications for from one to three hours will be sufficient at a time. But there should be no exposure between times. The patient should be strictly confined to the bed or a comfortable room. If there be nausea and vomiting the patient should drink hot water freely and promote the vomiting till the stomach is well cleansed. Also, enemas should be used freely to cleanse the bowels. If there be convulsions or delirium, there should be ice or snow kept upon the head or very cold cloths. These should be changed frequently so as thoroughly to cool the head. If the fever rise high, the back of the head can be poured with cold or tepid water by placing the head over a wash tub by the side of the bed. This application may be made for five minutes more or less according to the heat. In severe cases of delirium the head should be entirely enveloped in snow or pounded ice for several hours until there is an entire restoration to consciousness or reason. While these cold applications are being made to the head, the hot fomentations must be faithfully applied over the region of the stomach and also in bad cases to the feet and legs. These will serve to draw the blood from the head and will give quiet to the nerves. With proper care all this can be done without wetting seriously the clothing. Towels, sheets and blankets should be used, and changed, so as to prevent the water from running down and wetting the bed. A skillful hand will see at once the way to do this. A change of sheets and blankets is necessary as one set can be dried while the other is

in use. We make these remarks here, although they are equally applicable in the different forms of acute disease. Still in contagious forms of disease more care is required for cleanliness. When the chills are relieved and the pains subside, which will be usually after the first or second day, the fomentations may be abated, but not entirely dispensed with, until the pits are developed. In the second stage, after the eruption is well established on the surface, the most important part is to allow the virus to escape as freely as possible from the body; this will be effected by the application of the wet sheet packing, or by compresses applied to every part. These may be used out of warm or tepid water. These applications, made carefully, will afford great comfort to the patient. They remove the dryness of the skin and allay nervous excitement. It is very seldom that hot fomentations are required in this stage. But if there be chilliness at any time they should be used, or hot applications by dry heat, like tins or bottles filled with hot water, applied to the feet or back. The wet sheet pack may be used once or twice a day for one hour, a little more or less at a time, as the symptoms may require. The patient then may be sponged off in tepid water and allowed to rest. The local applications should be made by the compresses so as to keep the virus from being absorbed. All these applications should be made with discretion, varying them to meet the different conditions and temperaments of different individuals, keeping in mind the great object, that of removing the virus, with as little inconvenience as possible, and with as little expenditure of vital power. In all our applications we endeavor to make our patients comfortable. The water treatment in this respect is quite different from that of drugs. For in the use of medicines it is often expected to make

the patient sick by the operation; but the water may be so applied as to give ease and comfort.

After the second stage nothing further remains to be done save to perfect the cleansing process by continuing the packing and compresses, so long as there are any pustules discharging. The wet linen should be kept on the face after the pustules have appeared until they are entirely healed. Some physicians recommend the use of cream, sour milk and buttermilk, and simple cerates of different kinds; but we do not know that these preparations possess particular advantages over the simple wet cloths. There would be no harm arising from their use, provided the wet linen is applied over them. Tepid water enemas should be used once or twice a day. The diet should consist of gruel, toast water, arrow root, slippery elm, or some similar preparations. When the appetite begins to return, weak soups, beef tea, toast and similar articles may be used.

SCARLET FEVER (Scarletina).

This form of malignant contagious disease is dreaded by some people even more than the small pox. It is confined principally to children, and is deemed by many physicians the greatest scourge in the world. The blow is struck so suddenly that danger is scarcely apprehended until death has claimed his victim. We would remark here that the importance of proper diet and regimen among children should be strenuously enforced in view of the nature of this disease. Its fatality evidently arises chiefly from the state of the system. If the body be pure and the blood and fluids generally free from morbid humors, this virus has but little to operate upon, and it passes over with very little difficulty. But, if the system should be full of a scrofulous taint, or rendered impure by improper

food and drinks, or neglect of cleanliness, then we find a malignant disease indeed, and one which it is very difficult to control. We have good reason for believing that the carelessness of parents in regard to the food of their children, as well as various other habits, is intended to be severely rebuked and corrected by the great and good Creator, through the ravages of this disease. The law of nature is, that children should live on simple food, such as milk, fruits, and farinaceous articles; but in most families before the child completes his first year he is fed with strong food, such as pork, fat beef, rich gravies, pastry, sweetmeats, candies, &c., all of which injure digestion, vitiate the blood and fluids, causing the teeth to turn black and decay, thus preparing their systems for speedy decomposition when disease comes. We urge parents to consider this matter and to act on the acknowledged principle that "an ounce of prevention is of more value than a pound of cure."

Symptoms.—There are three varieties of this dreaded disease noticed in medical books, the *simple*, *anginosa* (*or choking*), and *malignant*. These varieties are all produced by the same virus, and are to be regarded simply as a more or less severe form of the disease. In the simple variety the disease is very mild; in the anginosa it is more severe, and in the malignant the most severe. In each variety the disease is usually preceded by chilliness, weariness and peevishness, pain in the head, redness and humidity of the eyes, frequently nausea and vomiting. In bad cases, vomiting of green bilious matter, tongue becomes coated with a white or yellowish coat, edges often appearing very red; breath exceedingly fetid, tonsils swollen and ulcerated in severe cases, great prostration, fever intense, rapid and laborious breathing. In the malignant variety the most violent symptoms are confined to the head and throat. The disease

often terminates fatally before the eruption becomes fully developed. There is continual vomiting, the eyes are half closed, stupor, pale eruption in spots, livid appearance of the lips and extremities, frequently a thin acrid burning discharge from the nose, also a rattling in the throat and chest. These are the general symptoms. There are many changes and variations in these symptoms; but when children are seized with sudden illness, at times when scarlet fever is prevailing, the fears of parents and nurses should be at once aroused, and no time lost in making proper and efficient medical applications.

TREATMENT.—The first and great thing to be accomplished is, to cause the virus to pass off as rapidly and as easily as possible through the skin. It is truly a most malignant virus. In severe cases, if this remain even a short time within the body, almost irreparable mischief may be done. It is perfectly astonishing how quickly decomposition takes place, often before death the flesh becomes putrid and soft where the humor is retained. Even in mild cases it becomes very necessary to hasten the exit of the virus from the body, and not to cease the treatment until the whole is removed. The retention of a small amount of this matter will cause dropsy, sore eyes, running at the ears, or some other disagreeable effect, which may annoy the little sufferer many years, and often produce premature death. Therefore we urge parents and nurses, whose office it is to watch and prevent all such serious evils, to be fully awake to the importance of pursuing the right course with this malady. As the disease is to pass off through the skin, the first object should be to bring the virus to the surface. This may be done in the same way recommended in small pox. During the chilly stage the hot fomentation must be used until the chills are subdued, and the rash fully developed. The fomentations are to be applied over the region

of the stomach (see fomentations). They should be changed as often as may be necessary until the chills are removed. The head should be kept thoroughly cooled during the time of the fomentations. The feet are to be kept warm. If there be nausea or vomiting, hot water may be drank freely. Children may be allowed to drink freely of cold water provided they can not be induced to take it hot. Still in cases of chilliness the hot water seems to answer best for slaking the thirst, removing the coldness and keeping out the virus. The water should be *hot*, not merely tepid. As this disease passes very rapidly through the different stages, in from three to twelve hours after the attack, the rash will often be fully developed. Then the tepid, or warm wet sheet packing (see wet sheet packing) should be resorted to. So soon as the chills are fully removed, the compresses may be used *cool*, or the *tepid* wet sheet packing, until the virus is eradicated. The patient may remain in the wet sheet from thirty to ninety minutes. The tepid sponge bath or a hip bath may be used, temperature about 90° F., for one or two minutes, when the patient may be wiped dry, placed in a dry bed, and permitted to rest, perhaps from thirty to sixty minutes, when the compresses should be again applied over the body, and in severe cases over the lower limbs. It should always be remembered that in cases of burning fever the body may be cooled almost, or quite, as readily by warm applications as by cold ones. In desperate cases we frequently resort to wrapping the whole body in hot wet compresses, changing them as often as cooled, until the fever and nervous excitement are subdued. In such cases we envelop the head, especially the back part, in snow or pounded ice. The whole paroxysm is usually passed through within the space of one week from the time of the first attack. No pains should be spared in endeavoring to remove the last

vestige of the virus from the system. This is effectually secured by the wet sheet packing, and a sponge bath after it, once a day, continuing them from two to four weeks. Sometimes in *mild* cases of scarlet fever, under other treatment, after the rash is removed, the patient will bloat. In some cases the bloating increases and the patient dies of dropsy. This fatality may be attributed to the injury done the skin by this deadly virus. Dropsy is, perhaps, more liable to follow in a mild case than in one more severe. Under the water treatment, if applied as directed, very little danger is apprehended from this sequel ; yet, should it follow, no time must be lost in restoring action to the skin. This is effected by means of sweating. If immediately attended to, the object may be accomplished in a short time. The hot wet sheet packing, fomentation, or hot hip bath, are the means we recommend. One of these should be applied thoroughly once a day (see descriptions). Sometimes, again, after *severe* scarlet fever the patient is left with sore eyes, sore throat, or running at the ears, and deafness. All these may be removed in a short time by a judicious course of water treatment, if it be resorted to soon after the attack, and even when of longer continuance they may be cured by a *persevering* course. We wish to have it fully understood that water may be relied upon as a certain remedy in cases of scarlet fever. The reports from hydropathic physicians, and other physicians, who have used water as a remedy in this disease, are enthusiastic in its praise. Many of them have but a very imperfect knowledge of its use and efficacy, still with all their inexperience they are so successful as to be inclined to discard all other treatment and depend upon water alone. They speak of curing the most malignant forms of the disease with scarce a failure, and we are prepared to give the fullest credence to these reports, for in many bad cases, under our ob-

servation, the water treatment has acted like a charm. Generally the cases which are treated from the commencement of the disease with water are so easily managed as to give the impression that the patient was not *much sick*. We will report one severe case to show the result of perseverance in the use of the treatment, even after all hope was abandoned.

The patient was the child of Wm. M. Searing, Esq., Saratoga Springs. He was nearly six years of age, of very fair health. In about three days after the exposure he was suddenly seized with chills and the usual symptoms of a severe attack. The parents, not knowing of the exposure of the boy to scarlet fever, and fearing some serious disease, called in their family physician. He pronounced the disease scarlet fever. The parents having had some previous experience in the efficacy of water treatment in that form of disease, immediately informed their physician of their preference for hydropathy. They gave the case into the hands of the writer. It was midsummer. The child had been suffering for twelve hours. We found him in a high fever and delirious, with a pale rash upon the skin, and very restless. We first directed the hot fomentations over the region of the stomach, with cold applications on the head, especially over the back part. These hot cloths were frequently changed for nearly one hour, when the child became quiet and slept well through the night, the compresses remaining on undisturbed. The virus seemed to leave the internal organs and was passing off well through the skin. Had he been kept quiet we think we should have had no more trouble with the case. But, being a very active boy, when he awoke in the morning he sprang out of bed, exclaiming, "Mother! I am well!" He remained up a short time when the rash receded and he was again seized with the most alarming symptoms. At eleven o'clock that morning we saw him again. At

this time he was entirely unconscious and in a muttering delirium. We again ordered the hot fomentations, with cold applications on the head. The applications did not now seem to give relief. This was the second day of the attack. The patient became more and more restless, and finally raving, rendering it difficult to apply the water. Still we endeavored to make some water applications. Thus matters went on from bad to worse, the family physician visiting the child every day, and asserting the case to be hopeless. On the evening of the fourth day the shrieks of the poor sufferer were constant and heart-piercing, while the parents were only waiting and wishing for death to close the scene. So passed the night. Next morning we visited the patient, found him still alive, but no symptoms of improvement. A solemn stillness pervaded the house, broken only by the piercing shrieks of the apparently dying boy. The grandfather was watching with the sufferer. We proposed another trial of water applications, informing him of the difficulties we had labored under, from the discouragement of the parents and nurses, and that we had not been able to carry out the prescription as we desired; and if he were willing to assist we would stay and make the applications. After some hesitation from the feeling that it could be of no possible use, he consented. It was a very warm morning, yet the patient was cold at the extremities, and the heat concentrated in the head and throat. There was the half closed eye, the livid appearance about the lips, and purple and cold extremities. There was surely but little ground for hope in any prescription. But, under these discouraging circumstances, we determined to do what we could to relieve, at least, if we could not cure. Our first work was to fold sheets several thicknesses and dip them in hot water, wringing them dry and applying them as hot as the patient could well bear

to the lower limbs, wrapping each one in a separate sheet and covering them carefully with dry blankets. The same were applied also around the lower parts of the body, and similar applications were made to the arms. These were changed as often as they became cool until a free circulation was established in the extremities. Simultaneously while this process was going on with the extremities, pounded ice was applied to the head in a cap, leaving one or two thicknesses of cloth between the ice and the head. This ice was so arranged as to be carefully spread over every part of the head, and especially the back part and the nape of the neck, where there seemed to be the most heat. As the ice melted another cap was prepared to take the same place and so a constant cold application was made to the head, while the hot ones were made to the extremities. The object was to relieve the head and equalize the circulation. No visible change was apparent in the patient until about 3 o'clock, P. M., when his screams began to grow less piercing, and he showed a little appearance of returning consciousness, and soon after spoke some rational words. The applications were continued through the day and also through the night. He screamed only at intervals through the night, and on the next morning was decidedly convalescent. His throat continued to swell, was very much inflamed and very hard. The hot applications to the extremities were in a great measure omitted, as there seemed to be a natural warmth restored. In about three days after, the swelling in the throat broke and discharged a large quantity of pus. The swelling then as rapidly disappeared, and in about ten days was entirely gone. There was a feebleness for a few days longer, but from that time onward he has been as healthy a boy as we find, and no trace of scarlet fever left to embitter his future days.

We have given this case in detail, showing what may be done in desperate cases of disease. We have treated other desperate cases of different forms of disease in a similar manner with the same success. On our theory, that disease consists in an *inability* of the organs to perform their functions, we can readily see on what principle the cure is performed. By the water applications the organs are relieved of the virus that disturbs their healthy action, and when thus relieved, they resume their functions as usual. So we can see, that even in desperate cases, when the organs are not destroyed, if they can be relieved, the functions of vitality will be restored again to their normal condition.

In being thus specific in our directions in the treatment of severe forms of disease, and governed by our general principle, that disease is an *inability* of the organs to perform their functions, and also that a remedy is any agent or substance which will restore the *ability* to these organs, then, we trust that our readers will be able to understand the general principles of this treatment, and to make such applications as may be necessary in cases of *minor* forms of disease, without the necessity of explicit directions.

TYPHUS FEVER.

This form of contagious disease is hardly second in point of fatality to the two which have been previously described. In truth, its universal prevalence among adults and children makes it perhaps even more to be dreaded than that of scarlet fever. The nature of the disease is such, that nearly every organ of the system is affected by it, and the *inability* of the organs to perform their functions is very general.

Symptoms.—The virus which produces this form of disease seems quite different from that of small

pox or scarlet fever. Some medical writers have even doubted whether typhus fever were a contagious disease. But there need be but little doubt of its contagious nature, and at the present time it is almost universally admitted. Under certain circumstances we find typhus fever developed without the presence of the contagious matter. But, being once developed, we find it spreading and prevailing through the influence of the contagion. This virus operates slowly, and even after the system becomes inoculated, it may be some three or four weeks before the disease is fully manifest. The symptoms of its commencement are, chills, flashes of fever, great depression of mind, pains in the back, head and loins, fear of some approaching calamity, loss of appetite, tongue often white and tremulous, bowels irregular, confined or relaxed, shivering fits succeeded by flushing of the face and dry heat of the skin, often intense headache, senses less acute than in health, giddiness, drowsiness through the day, disturbed, fitful and unrefreshing slumber at night. More or less of these premonitory symptoms usually herald an attack of typhus fever. But occasionally they are wholly absent, and the disease suddenly appears surrounded by its distinctive signs, such as chills, thirst, increased heat of the skin, frequent pulse, headache, throbbing at the temples, tongue dry, adhering to the roof of the mouth, sometimes clean and smooth, but more frequently furred, the edges often red and a dark streak through the centre. Bowels are tumid, filled with gas. The chest is very commonly affected, breathing rapid and laborious, often a hard cough but no expectoration. The brain is early affected. The patient seems dull and stupid, not disposed to answer when spoken to. Towards the end of the first week delirium appears, the muscular power is nearly gone, the patient lies quite motion-

less, often in a muttering delirium, with little or no sleep, but in a kind of lethargy.

This is called the first stage of the disease, and usually continues about one week.

With the second week commence more seriously the typhoid symptoms. The pulse is more frequent, weaker and compressible, the tongue more dry, a dark brown or black filth accumulates on the lips and teeth, the headache ceases, but the muscular debility is increased. The voice becomes very feeble and the patient scarcely able to swallow.

The force of the disease seems to concentrate about the head and abdomen; but there is a general inability of all the organs of the system; every part becomes diseased. The eyes are about half closed, the mouth open, and a ghastly appearance of the countenance. As the disease progresses there is frequently convulsive twitching of the muscles and tendons about the wrist, and other parts of the body with tremulous movements of the tongue; this is termed "subsultus tendimum" and marks an extreme condition of the disease. In this condition we have an eruption upon the skin resembling flea bites. The patient is often raving and tries to escape from the bed, sometimes he talks in a loud, angry, incoherent manner, but more generally, is perfectly tranquil, picking his bed clothes, and speaking in an under tone some short sentences, which he repeats again and again. Some new object of sight or loud sound will arouse him for a moment, but he will relapse immediately into the same condition. At this stage of the disease, sensation is nearly gone, the patient can scarcely see or hear. The disease usually runs its course in from four to eight weeks.

Treatment.—This form of disease has been the scourge of mankind from remote ages, and no specific medicines are known which can be depended

upon to cure it. But the water treatment within the past half century has proved itself an efficient remedy.

About fifty or sixty years since, Dr. Currie of England wrote a book in which he highly extolled water as a remedy in typhus fever. His mode of treatment and application, were of the rudest character. He exposed the patient in some way, and then dashed him with two or three buckets of cold water, wrapping him immediately after in dry blankets so as to produce perspiration. This was done once or twice a day, according to symptoms. His rule was to "Dash the patient with cold water, when the heat of the body was steadily above the natural standard." The object was to lower the temperature, and produce perspiration. The virus then seemed to pass off through the skin and the patient rapidly recovered. With all the inconveniences which attended this practice, the reports of success were perfectly astonishing. Dr. Currie sounded it far and wide as a wonderful discovery. Others treated typhus fever patients in a similar way, with like success. But with all its acknowledged efficacy, after a time it seemed to fall into disuse. Either, because it cured the patients too quickly, thereby not giving physicians enough to do, or from some other reasons not known to the writer. What we are interested in at present is, to know that water has been used by eminent physicians, in the cure of typhus fever, with great and acknowledged success. Therefore we see that the water treatment is adapted to the cure of this disease. We believe the disease is produced by a specific virus, and that it is removed from the body through the skin, like most of the contagious diseases. The indications to be observed in the treatment, are to establish an action upon the skin, and remove the virus, as soon as possible. This can be done without producing the disagreeable shocks by

cold water, or by any other disagreeable treatment. In the first symptoms we prescribe the hot fomentations, for the chilly depressed stage of the disease (see fomentations). These should be applied promptly and thoroughly according to the severity of the attack until a natural and steady warmth is restored. Great care is to be taken in this stage of the disease, to keep up a gentle perspiration until the fever is either broken up, or the heat of the body becomes higher than the natural standard. When this is the case, the chills have ceased, and there is no occasion to use the hot fomentations, yet they may be used with great advantage, when there is any internal congestions, even while the heat of the body is above the natural standard. But, if there be no congestion or internal pains, we apply the compresses cool or cold, as may be most agreeable to the patient. We regard the feelings of the patient, if he be in a rational state of mind, as the best guide for the temperature of the water, we prefer not to disturb his feelings, by disagreeable applications. We may sometimes use hot and cold, upon the patient, during different parts of the same day. We advise sponging the whole body, twice a day in cold, tepid, or warm water, as may be most agreeable. If the patient be able, the wet sheet packing, for about an hour a day, or even twice a day, will be found beneficial. The temperature of the sheet can be, like the other applications, agreeable to the feelings of the patient. After the wet sheet pack, the patient may be sponged in tepid water, followed by dry friction. Among the most important things to be observed, is keeping the head cool. This should be well understood and practiced, a failure here may cost the patient his life. The organs most in danger from this virus, are the brain and bowels. The brain from congestion; the bowels from the virus passing off upon the mucous mem-

brane. The brain is to be relieved by the cold applications, and the bowels by keeping the virus upon the skin. No drastic medicines in the way of cathartics can be used without great danger, as they tend to fasten the disease upon the mucous membrane, causing ulcerations and hemorrhages. By making cold applications to the head the whole body can be sufficiently cooled. By the hot fomentations, cool or cold compresses over the bowels, used as the heat of the body may require, there is but little difficulty in securing a removal of the virus from the body through the skin. Pains should be taken to keep the feet warm by bottles of warm water or other warm applications. Sometimes the limbs become cold, in such case they should be warmed by dry blankets, or the hot wet sheet, folded so as to secure the heat, and covered with dry flannels. Injections of tepid water should be used daily in quantities sufficient to cleanse well the intestines. The nourishment should be light and of easy digestion, consisting of beef tea, toast water, panada, slippery elm, gum arabic water, or other mucilaginous drinks. A small quantity of good beef tea, and slippery elm water are the best for nutrition. Only a small quantity of food will be digested, and therefore more should not be taken. The patient should be allowed to drink all the water he may desire, partaking of it in small quantities. As in scarlet fever and small pox, in the chilly or depressed state, hot water will answer better than cold, still the preference of the patient may generally be consulted.

In the above we have given directions sufficient to guide almost any case of typhus fever to a happy issue. We have seen many cases carried through under this treatment with very little inconvenience or suffering; taken in the first stages and carried carefully on step by step, the water treatment seems to have a perfect control over this dreaded disease.

We have treated over a hundred cases by the use of water without the loss of a single patient. We have had patients under various circumstances connected with the disease, and used the treatment in a variety of ways. As people become acquainted with disease and treatment from the relation of particular cases, it may be better to give some examples, rither than try to describe the treatment in an abstract manner.

The case of Mrs. L. of H., in Mass., is one of interest, as it will show some important phases of the disease and treatment. During the winter of 1846 and 7, typhus fever prevailed quite extensively in some parts of western Massachusetts, and eastern New York. A brother of the patient, whose case we are about to describe, was a practicing physician. He was called to attend a man laboring under typhus fever. The patient was very sick and in spite of all the skill and care of Dr. L. died. Soon after his death Dr. L. was seized with the disease, and in a few days he also died. Soon after his death the sister who acted as nurse was attacked with the same fever. She was attended by the same physician who had treated her brother. After about ten days the physician honestly told her husband that he had no confidence in medicine for controlling this disease, and advised the use of water as the only hope. This physician, like most of his brethren in the Allopathic school, imagined he knew all about the water treatment, and undertook to prescribe. His direction was, "the patient should take a wet sheet pack." After the departure of the physician, and in accordance with his prescription, she was put into the wet sheet. But now came the dilemma, how long she was to remain in the pack, and what was to be done after being taken out, this son of Esculapius had forgotten to advise. By the counsel of her husband she was finally released, but whether

she was improved by it or not, or what change was expected in her condition, no one felt competent to decide. Being then in charge of the New Lebanon springs water cure, we received a call to visit the patient. Our first call was made the day after she had begun the water treatment. The physician was present, and gave a correct history of the case, expressing his fears as to its termination. From an examination we found congestion of the brain, with severe pain and throbbing, harsh dry cough and cold feet, and the usual symptoms of typhus fever. As they were endeavoring to carry out the water treatment the physician had ordered cold water to the head, and we remarked it was a proper prescription and ought to give her relief. We inquired how often the cold cloths were changed, and found that they were in the habit of pouring upon the head a tumbler of cold water whenever the patient complained of heat. She was in great distress and after an application of cold water from the tumbler, which truly wet her head, hair, and pillows, she remained quite comfortable for a few minutes, when she would again groan with pain. The same applications were repeated from time to time till she was literally drenched with water. After witnessing the process, we remarked to the physician, "Sir, are you not afraid that your cold applications will do more harm than good?" The physician stared at me, as much as to say, "I am using your simple remedy, and I did not know that it would *ever* do any harm. I thought it *always* did good." We remarked again, that when cold applications were made, unless they were frequently changed or repeated, a reaction would take place, and the blood and heat be greater in the parts than would be if no application of cold had been used. Consequently the patient, instead of becoming better by the use of cold water, was often made worse. The husband of the sick lady

turning to the physician, enquired, "Is that so, doctor?" The physician replied: "It must be so, but I had not thought of it." The truth was the patient was evidently growing worse under the use of a remedy which, with a very little variation, would have produced beneficial effects. After making a few more explanations, we directed that the wet pillows and sheets should be removed, and dry ones furnished; a dry sheet was then folded and laid upon the pillow, protecting it from the water. Cold water was then provided, with plenty of ice and two towels or napkins folded in shape and size to cover the head as much as was needed. These were thoroughly cooled and slightly wrung, and placed one on the top and front of the head, and the other on the back part and on the neck. These were allowed to remain about five minutes, less or more, when they were removed and laid upon the ice, while two more were applied in like manner to the head. Thus changing and keeping continued cold applications to the head, in about one hour after this process was commenced, the patient became very comfortable and disposed to sleep. These changes were made as often as was necessary to keep the head cool, and the patient rested quietly through the night. We would say here, that the feet were thoroughly warmed by hot applications. As there was a dry hard cough, a hot compress was applied over the throat and chest and changed about once in three or four hours. These applications were continued, and the patient sponged night and morning in tepid water, the clothing changed at least once a day; this constituted the course of treatment, and in a few days there were evident symptoms of convalescence, by the fever being removed and the appetite returning. We should have remarked, no form of cathartic is allowed in these cases, but the bowels are to be kept open by tepid enemas, used

once or twice a day. After convalescence was fully established, and we had ceased our visits, a second sister was attacked with the same disease, and we were again called to prescribe for the new patient, when we found the first one still doing well. Her appetite had become quite good and she seemed mending. But, from the excitement occasioned by the sickness of her sister, or from some other cause, she had, about this time, a severe relapse. The same symptoms returned which had at first troubled her. Before we were scarcely aware, she was indeed dangerously ill. As we had not had the experience in the efficacy of the water treatment in those days we have had since, we became somewhat troubled to know how to manage. We found that we could not control the heat in the head by the use of ice-water thoroughly applied, and the patient was evidently growing worse, and becoming uncontrollably delirious. She soon arrived at that point where she resisted all our measures with a determined phrenzy. While we were thus foiled in the application of our chief remedy, and no other means were known which could be relied upon, it may well be conceived that gloomy forebodings rested upon that household. The physician who had formerly attended, was present, and was requested to suggest some means which would give relief. He replied he knew of no means except the head should be shaved and blistered, which he advised. We remarked that we could conceive of no rational tendency of a large blister upon the head to give relief, but, should sooner think that it would make a well person crazy. We further remarked, if we had the head enveloped in snow we would have more hope of controlling the heat. He replied we had better try it. A messenger was sent to procure snow, which was found then at a little distance upon a mountain. A cap was made by sewing together two pieces of cloth and leaving

a place to receive the snow. The snow cap was so shaped as to entirely envelop the head, and strings fastened under the chin to prevent the patient from removing it. The first application of snow melted as rapidly as if a current of hot air or steam was passing through it. Another cap was prepared in the same way, and when the first began to drip it was removed and the fresh one applied. We should have said that a large towel or sheet was so placed around the neck of the patient as to absorb the water. In about four hours after the snow was first applied, the patient was evidently easier, and showed some signs of returning consciousness. In six hours she fell asleep; she had not then slept for more than forty-eight hours. The snow was continued and changed as often as it melted, the patient complaining of an increase of pain whenever the snow was absent. The fever raged for about two weeks after this relapse, and the snow caps were kept constantly applied to the head. After several days, the neighbors who knew something of the treatment, became much excited, and said, "Surely the patient must die by this constant use of snow upon the head; for," said they, "who ever heard of a person living with his head two weeks in a snow-bank." But, the relief was so apparent that neither the patient nor her friends were willing to dispense with the snow until orders were given. After two weeks, the snow was left off for a short time, and at the end of the third week was nearly dispensed with. The result was, that she was entirely restored, *without the loss of her hair*, and to better health than before her sickness. The sister, who was sick at the same time, passed through the different stages of the disease without any unusual changes under the water treatment. But, what seems of the greatest importance in these cases, as also of others treated with water cure, is, that when they recover from the disease they enjoy a better state

of health than before their sickness. It seems to renovate and change the whole system, making those who had been delicate before, strong and robust. This perhaps is sometimes the case, even under the drug treatment; but, as a general rule, cases of typhus fever, as well as many other cases of acute disease treated with drugs, and especially mercury, never again enjoy robust health. Mercury often remains for years in the system, after being thus introduced, and becomes a fruitful source of disease, in the form of rheumatism, neuralgia, dyspepsia, liver complaints, &c. We protest solemnly against the use of all those mineral poisons which tend to destroy the integrity of the nervous action, and bring the system under an action peculiar to those minerals. They destroy health, embitter life, and bring on premature old age and death. In every form of acute disease, water in some of its forms of application, can be used with more decided benefit and less harm to the system, than any drugs. We insist then that water be used, and that every one who acts as a nurse, should learn its use, and be ready to ward off the first attack of disease, or learn how to carry the invalid through, without danger to life, or danger to future health and happiness. If medicines are used, they should be of the simplest kinds, used for specific purposes, and then laid aside. In some cases it may be desirable in the first attacks of disease to use medicines. If, for instance, the attack be sudden, and the patient has been indulging freely in food, and stimulating drinks, it may be well to use some simple emetic with the water, such as salt, mustard, boneset, lobelia, or ipecac. Then, after the stomach is cleansed, a gentle laxative, such as salts and senna, senna and ginger, castor oil, rhubarb, dandelion, black root, or some similar article, may be allowed, to thoroughly cleanse the "primæ viæ" or first passages, even beyond what

simple water enemas will do. Some may prefer homœopathic medicines, to which we will not object provided they are adapted to the end in view. The enemas should not be neglected, and the drinking of the water must be insisted upon, even if other articles be used. The object of cleansing those passages must be apparent to every enlightened mind, simply to remove the accumulations of morbid matter and to prevent irritation therefrom. But, after these operations, all cathartic medicines act as an irritant, and are unnecessary and dangerous. We say again, the morbid virus must be removed by the way of the skin, and not allowed to irritate the mucous membrane. Here the great danger lies in all eruptive forms of disease. If the virus be thrown inward, the patient will be most sure to die, or if he live it is with the loss of health. We can not insist too strenuously upon this point. It is a very simple thing to cure, if the indications of nature are observed, and followed. But if nature be thwarted in her operations, then even the most simple forms of disease become obstinate and dangerous. We resort to even *simple* medicines, only in a *very few cases* of typhus fever or other acute attacks. Our chief dependence is upon *water* which we regard as the "*magnum bonum dei*" of medical agents.

We deem it scarcely necessary to enter farther into detail as to the treatment of other cases of *typhus fever*, but will merely allude to some peculiarities, and their management.

In the case of Mrs. S., who was attacked with typhus fever after long continued mental excitement, thedisease seemed to concentrate upon the brain. She was under the water treatment from the first, and, although greatly prostrated by the disease remaining for a long time, yet the constant application of ice to the head, kept her in possession of her reason, and the fomentations which were used

very thoroughly for a long time, were the means of removing an old difficulty from the side, which had troubled her many years. She was entirely restored to health. The fever in this case was not entirely subdued, under eight weeks. She lingered no doubt by reason of her previous ill health.

The case of Mr. B., was one in which the disease was very slowly developed. He had been restless, chilly, and extremely nervous for three or four weeks, when he was suddenly seized with the most alarming symptoms, and became a raving maniac. Being a strong man, it required several persons to restrain him. When we first saw him, he was in this condition. The house was a scene of the utmost confusion. The sick person was determined to "go somewhere" and all the strength of the family was requisite to retain him in his room. They were obliged even then to resort to cords and bands to prevent personal injury. In this condition (it being winter) a snow cap was so arranged as to envelop the whole head and renewed as often as was necessary. A dry sheet was placed under the head to prevent the melted snow from wetting the clothing. Under these desperate circumstances, we gave the patient an anodyne. Under the influence of the anodyne and snow cap, he soon became quiet, and shortly after fell asleep. He slumbered quietly about six hours and then awoke perfectly rational. The use of the snow cap was continued, and there was no return of the phrenzy. His fever lasted several days after this, and he was treated in the usual manner. Soon after he was perfectly restored. Two brothers of this patient took the disease from him, and passed through it under the treatment with the most happy results. In another case a lady about thirty years of age, who had been troubled many years with dyspepsia and liver complaint, while suffering from this fever, was very badly

bloated. Not being able to secure a satisfactory cleansing of the stomach, and bowels by the use of water, we directed a cathartic of the leptandria virginica. It operated freely, and gave immediate relief from the bloating. The dandelion pills would have answered just as well (see recipe). This case was an exception to our rule of using cathartic medicine, and almost the only one in which we have used it. We mention this as a peculiarity connected with a bad liver difficulty. She was restored to a much better state of health than she enjoyed before the fever.

In a case of severe hemorrhage from the bowels, we resorted to the use of a small portion of tannin in the water used for enemas. The water was applied in the form of hot fomentations also, at the same time, and relief was immediately obtained. Whether the tannin was of service we can not say. It is a good astringent and the use of it would be allowable in cases of hemorrhage.

We deem it unnecessary to give further cases, although there have been many very important ones treated, cases of delirium, of hemorrhage, and other peculiarities which have been met and relieved by the simple use of water. We have no fears of giving too much importance to the water treatment in typhus fever. If properly applied, we say again, we deem it a sure remedy.

One point further; in no disease is there such liability to a relapse. Great care should be exercised in the first convalescence, not to allow the patient to be exposed to a chill, or indulge in hearty food. If there should be a relapse, the same course is to be pursued that is recommended in the first attack.

SORE THROAT.

Malignant Sore Throat, Black Tongue.

The next form of disease that claims our attention, under the group of contagious, is the *malignant sore throat.* This disease resembles in many particulars scarlet fever, and were it not almost equally common among adults as well as children, might be considered a type of that disease. But, as it attacks equally all ages, we conclude that it is produced by a distinct virus. This virus, in its development and progress, is very rapid, and often proves fatal in a few hours after the first symptoms appear. The attack is heralded by the usual symptoms of chilliness, flashes of fever, drowsiness, nausea and vomiting. The first distinct symptom of the disease which determines its character is the ulceration of the throat and fauces. A false membrane forms rapidly over the upper part of the throat, which soon seriously disturbs deglutition or swallowing, the breathing becomes stifled and laborious, the lips and face are flushed and purple, black sordes accumulate upon the teeth, the countenance is haggard and livid, and as the disease advances, the sickness at the stomach increases with great depression and distress, and, unless speedy relief is given, death closes the scene. This disease is communicated by contagion, from one to another, or is developed occasionally, like typhus fever, from predisposing causes of itself. It has prevailed for the past two winters in Albany and other places in the state of New York, to an alarming extent, and proved very fatal. Many valuable lives have been lost by this fearful disease.

Treatment.—As the disease is very rapid in its progress, so must the remedies be promptly applied. In this as in other fatal forms of disease, the water treatment becomes the remedy for the people; for however great the skill of physicians may be they

can not ordinarily be present to meet the first symptoms. Time lost here, all may be lost. No medication can make up for neglecting the first symptoms. These symptoms, parents and nurses are the first to witness. Then is the time to apply the remedy With this, like every other form of sudden, acute disease, parents and nurses should become familiar in theory, with the means to be used in case of an attack. They should have their compresses prepared and other necessary articles ready for use. Thus forewarned and forearmed, they may hope to break the first charge of the disease, before a physician even could be called. In the chilly stage, apply the fomentations over the great nervous centres, the stomach and liver, until the patient shall be in a free perspiration. Keep him in that condition, applying at the same time snow or pounded ice about the throat. If it be not possible to produce perspiration with the snow about the neck, use for a time, hot applications even there; stimulate the vessels well, and keep the blood moving freely, and thus prevent the forming of the false membrane on the throat. If the patient be not relieved by the sweating, the *cold* applications may be made again with safety to the throat, keeping up at the same time the fomentations, thereby producing a free and easy circulation through every part of the system. All this should be done with a skillful hand. There is no necessity of making the patient uncomfortable, by wetting his clothing, putting on dripping compresses and leaving them half covered, or by any other negligent or careless management. See that all is done right. The patient may be allowed to drink what water he pleases, either cold or hot. In the chilly stage, we prefer the hot water. But, if the throat become hot and dry, ice water, or small pieces of ice, may be allowed every five minutes, until the fever and thirst abate. It should

be used as often as we have directed, to produce a sedative effect upon the throat. The hot or cold water should be drank freely in case of sickness at the stomach, until it is thoroughly cleansed and settled. Be efficient at this stage of the disease and we believe you will be rewarded by satisfactory results. Promptness and perseverance here may turn the scale. "What you do, do quickly." These directions apply principally to the first stage of the disease. If the first shock be broken, and the disease still linger, there may be a variety of applications, such as the wet sheet packing, once a day for one hour, and then sponge in tepid water, the wet compresses, the hip bath, very similar to those we prescribe in fevers of different kinds. The feet must always be kept warm, and the bowels open by the use of tepid enemas. The compress should be worn about the throat until the last vestige of the disease be removed.

Many other things may be done to palliate and relieve the sufferer and facilitate the cure. As the disease is liable to come on very suddenly, in some cases the individual is attacked with a full stomach and bowels. It may be necessary to use other means more than water to cleanse the first passages. In such cases, if the effect of the water should not be sufficiently prompt and satisfactory, a cathartic should be given. Senna, sage, and ginger in equal parts make a brisk and safe cathartic (see recipe). If it should not operate in three or four hours, the dose may be repeated; or it is possible that by using the syringe at that time, the desired effect will be produced. Sage makes a very good drink in these cases of sore throat. Sage, alum and borax, sweetened with honey, make a good gargle, which can be used alternately with the ice. A ginger poultice may be put around the throat in cases where you desire the hot applications, and do not wish to make

frequent changes. A hot hip bath for fifteen minutes, 106° to 110° F., followed by a dripping sheet at 80° F., often tends to divert the diseased action from the throat. So also the wet sheet pack for an hour, followed by the dripping sheet at 80° F.; either of these baths may be followed by the fomentations, if taken in the first stage of the disease. We mention these, not as giving them the preference to the fomentations, but by way of variety. Sometimes one bath may be much more convenient than another, and may be preferable from the fact of its convenience, or rather from the inconvenience of other baths. Any nurse who has a common share of tact and judgment, can make these water applications in private families, with astonishing success. We have been surprised at finding by letters received from mothers, who have spent a few weeks at our establishment, how quickly they learned the water cure applications, and how successfully they used them. It would be well for those mothers who have a little leisure (and every mother ought to have) to visit a water cure for the purpose of learning the mode of treatment. It would save them much in anxiety, and often great amount of expense. We hope the time will soon come, when every head of a family will be well versed in the means to be used in preventing sickness and removing sudden attacks of disease. In the three forms of disease of which we have been last treating, it would repay every one well, to be fully acquainted with the mode and means of cure. It would not require more time than is often consumed in one week in idle gossip, to become quite familiar with the general symptoms, and the particular applications. A person who should know these things, in many cases would be able to prescribe for himself. "A word to the wise is sufficient."

MEASLES.

In this form of contagious disease, we have one that is very common, and mostly confined to children, simply because most persons have the disease before they come to mature years. Adults will take it as soon as children; but, it rarely occurs that any individual suffers from the disease a second time. It is also quite desirable that every individual *should* have it in childhood, the disease being much more severe with adults than with children. It is strictly a contagious disease, propagated entirely by the infectious virus. Once received into a family or neighborhood, it seldom leaves, until every individual has passed through it.

SYMPTOMS.—These are very similar to those which characterize this whole group or family. Beginning with chills, hot flashes, depression of spirits, pain in the head and back, cough and the general symptoms of a cold, loss of appetite, &c. These symptoms remain usually three or four days before the eruption appears. This usually commences first on the face and upper part of the body, and spreads slowly over every part, appearing last upon the feet. By the time it is seen upon the feet it begins to fade from the face. It requires a week or ten days to run its course. With a due amount of caution, there is very little danger to be apprehended from this disease. But by exposure it often becomes very serious and even fatal. Like other species of contagious virus if it be retained in the system, it soon begins to show its malignancy, and in a short time no human power can repair the mischief done to the organism. Even if life be saved the sufferer will generally ever after labor under some form of illness, until premature death ends the scene. It is all important to pursue a rational course of treatment during the different stages of the disease, thereby

effectually removing the virus from the system through the natural outlet, which is the skin. There is sometimes confusion and doubt in relation to the nature of the disease, it being often mistaken for scarlet fever. Considerable resemblance exists, particularly in the first symptoms, between the two forms of disease; but when the eruption is fully out, an experienced eye will readily detect the difference. In scarlet fever the rash is diffused generally over the skin, while in measles it is found in distinct irregular patches, and usually a little elevated.

The danger from measles, even when the eruption is developed, arises principally from inflammation in the chest. In weakly and scrofulous children this is liable to occur.

TREATMENT.—The first thing in measles is to bring the virus upon the surface of the body. This is accomplished by the same course of treatment which is prescribed for small pox and scarlet fever. During the chilly stage the hot fomentations are to be used until the chills are removed. These should be used over the stomach and chest. Generally, by the time the chills are fairly removed, the rash will be out. If it come out fully nothing more is required, save to keep the patient free from exposures, and from improper articles of food. This being done the rash will gradually disappear, and in about ten days be entirely removed. The wet compress should be kept around the body most of the time, and a tepid sponge bath once or twice a day, should be given, without exposure. It is not necessary to enter into every minutia of the treatment for this form of disease. Bring the rash or virus upon the skin by the fomentations, or by the wet sheet packing in the first stages, and then use little or no treatment, keeping from exposure, and the virus will soon pass off. If inflammation of the lungs attend, the fomentations must be used over the chest until

it is removed. Often it is sufficient if the hot cloth be put on twice a day, and well covered. If these should not suffice to remove the fever and cough, they must be changed as often as is needed, to produce free perspiration. After this, sponge the patient in tepid water, and then apply the hot cloth well covered, without change for from 4 to 6 hours. If the symptoms of inflammation do not subside let the fomentations be repeated as before. The patient may be allowed to sit up in a warm room well protected. The bowels should be kept open by tepid enemas. The food should consist of toast, rice, or bread puddings, wheat mush, or similar articles. In these acute diseases, the appetite is generally absent and care should be used not to force a quantity of food into the stomach. As digestion is mostly suspended, food, instead of giving strength, becomes an irritant, and increases the difficulties. A small portion only can be allowed with safety. In cases of scrofula or great debility, sometimes beef tea will be the best nourishment.

CHICKEN POX.

This contagious form of disease is not generally regarded as very serious, and needs no very special attention to carry the invalid safely through.

SYMPTOMS.—These are very similar in the incipient or first stages, to the other diseases of the contagious type, except more mild. We have the chills and fever, the head ache and back ache, often sickness at the stomach, and vomiting. The pustules in their first appearance resemble small pox, but as the disease advances, the difference between the two forms of disease becomes more and more apparent. The pustules come out more rapidly than in small pox, are irregular in size, and filled with a lighter

colored matter, break and discharge, and fill again. They appear more on the head, neck and shoulders than on the face. Often the eruption appears without any fever. The whole is usually passed through with but little disturbance, and does not require any specific directions for treatment.

WHOOPING COUGH.

This is strictly a contagious disease, and mostly confined to childhood, yet no age is exempt from an attack. It seldom troubles the same individual the second time. It is not regarded as a dangerous disease, yet it frequently proves fatal, either by neglect or exposure. It is more liable to go hard with scrofulous children, and with those predisposed to lung disease. Yet children who have had weak lungs, have passed safely through the disease and been materially benefited by it; the exercise of coughing, serving to strengthen the lungs. The best seasons of the year to have the disease, are spring and summer. It is more liable to be severe in fall and winter. Parents, who have in some measure, the choice of the time for their children to be exposed, should think of this. With proper diet and bathing, very little danger need be apprehended Every child should be exposed to the disease; for, it is almost impossible to keep clear from it through life, and when an individual has not had the disease, he lives in constant dread, and besides is liable to take it at a time when it may be very inconvenient to attend to it. Furthermore, it is much more severe with adults than with children. Between six and twelve years of age is the most suitable period of life. Younger children often suffer less, and even at one year old, with proper care the child will pass easily through it.

SYMPTOMS.—The disease usually commences with the appearance of a cold, some fever, hoarseness, hacking cough, which increases, and in a few days it becomes a shrill harsh cough, with a peculiar effort to recover the breath. From this it takes the name, Whooping-Cough. The disease will have a very regular course. In from ten days to two weeks after exposure, the symptoms appear. It will be then from three to six weeks, before the disease attains its acme. After six weeks it generally begins to subside, and in about twelve weeks from the beginning, will be nearly or quite gone. In the fall and winter, the cough will often continue until spring, being aggravated by every slight cold.

TREATMENT.—In the first stages, clear the system as much as possible from all morbid matter, by the use of the hot fomentations and wet sheet packing. Although you can not entirely remove the cough, yet the water treatment will so palliate the disease, as to give relief from all danger. The wet compress can be used to great advantage over the throat and chest, covered well with cotton flannel or cotton batting quilted in muslin. This compress should be worn at night especially, and the patient well washed in the morning in water from 85° to 95° F., and rubbed thoroughly. When the patient suffers much at night, the fomentations should be used for one hour in the evening, changing the hot cloths every five or ten minutes, then sponge the chest, change the clothes and put on the compress for the night. This will generally insure quiet sleep. When the cough is very hard and dry, a syrup may be taken, made by slicing raw onions and boiling them in molasses. A tea spoonful or two of this syrup every hour or two, will give relief, sweet oil can be added if needed, as a laxative to the bowels. Squills, antimony, ipecac and lobelia syrups, need not be resorted to, as it is not desirable to use strong ex-

pectorants. The drinking freely of water, either hot or cold, is of great utility in hard paroxysms of coughing. Vomiting sometimes occurs during these paroxysms and consequently the patient becomes very thin and weak, by not being able to keep food on the stomach. In such cases great care should be taken to give nourishment after the paroxysms cease. Young children sometimes strangle badly. Care should then be had that the position in which they are held, be favorable to the removal of the mucus which accumulates in the throat. To lean them a little forward on the chest is better than to lie on the back. Keep the child from taking cold if possible, as colds tend greatly to aggravate the disease. With these precautions and directions carefully observed, we anticipate no difficulty in going safely through this tedious and distressing complaint.

MUMPS.

In this peculiar contagious disease, the glands behind the ears become tender, hot and painful. The adjacent parts become swollen, and there is difficulty in opening the jaw. Sometimes only one side suffers, and at others both at the same time. Sometimes the swelling and inflammation having subsided on one side, occupy the other in the same way. The symptoms are attended with pain in the parts, and some slight febrile action. The disease reaches the climax in about four days and subsides in about four more.

Very little danger is to be apprehended from the disease, if it remain upon the glands of the neck. But in some cases the disease seems suddenly to leave the glands, and to attack the breast of the female on the same side. The breast becomes painful and tender, and after the inflammation subsides, is inclined to waste and shrivel. It occasionally passes

on to the brain, causing great disturbance. It sometimes thus shifts suddenly from the glands to the breast and to the brain with great rapidity. With males it passes on to the testes, producing great pain and swelling.

TREATMENT.—In the ordinary course of the disease very little need be done further than to avoid exposure to colds, and use no stimulating diet. A sponge bath, or wet sheet pack for one hour with a sponge bath after, is all that need be used. In case the disease leave those glands and affect other parts, whether male or female, we have treated them as we would a cold, using the fomentations so as to produce free perspiration or sweating, until the swelling and pain subside, keeping the parts swollen covered with hot compresses, usually removes the pain. Dr. Johnson speaking of the disease, says: "I have no doubt that mumps, as well as whooping cough, is strictly speaking an eruptive disease, the habitat of the eruption being the parotid gland instead of the skin." This being the case, the eruptive virus is to be removed, like other virus, by means of the compresses, or full wet sheet pack. We say again, with proper care, little danger is to be apprehended. There are some other forms of contagious diseases, which may be annoying, but are not serious enough for special notice in the treatment. For all these different complaints, the water treatment in the form of the wet sheet pack and compresses, sponge bath, wash down, or dripping sheet, used with ordinary discretion, will answer well as a remedy.

CHOLERA.

Asiatic Cholera.

This infectious or contagious disease, has prevailed very extensively as an epidemic in the United States, for several times during the past thirty years. It is unnecessary to enter into details in describing this fearful malady, or rather group of maladies.

Symptoms.—This form more nearly resembles cholera morbus than any other disease. It usually commences with a slight diarrhea, attended with no pain or any particularly unpleasant sensations. This diarrhea may last for several days, or almost at once begin the peculiar symptoms of cholera, which are in appearance the rice water or gruel discharges, flying pains, and sense of coldness in the abdomen; countenance pale, nausea, vomiting, prostration of the muscular power, great nervous agitation, cramps in the legs, arms, loins and abdomen, more or less severe; small weak pulse, intense thirst, urgent desire for cold water, and in most cases cold clammy skin. These symptoms may appear successively or almost simultaneously. As there are several varieties of this dreaded plague, all of which have some symptoms in common, all that is necessary here, is, to be able to distinguish the malignant from the more simple. As to the treatment, these different varieties, require a very similar course; except in the malignant type, a more prompt and efficient application is required to meet the first symptoms. Then, whenever we find a case of vomiting and purging, we may conclude that we have a case of cholera. If there be an abundance of bile in the dejections, we have a case of cholera morbus, a common disease produced by eating crude fruits, and other errors in diet, or by the taking of some poisons. There may be great distress, but seldom cramps in this species

of cholera. In children that are teething, we have sometimes another variety, called CHOLERA INFANTUM. That which is thrown off, is usually yellow or green, sometimes dark like coffee grounds. This is a dangerous disease, and will be treated in another part of this work.

We have also a FLATULENT CHOLERA, with which dyspeptics are often troubled. There is in this variety, great pain and distress, but very little vomiting or purging.

TREATMENT.—There are in these dreaded forms of disease two important indications to be met. The first is to cleanse the stomach and bowels of any impurities. The second to equalize the circulation. The water treatment meets these two indications the most promptly and efficiently of any thing known in the way of medicines. For the vomiting and purging, all that is necessary, is to drink freely of water, and use it as needed for enemas. As the disease is of a cold nature, the water should be hot and drank freely. Immediately after vomiting, the patient should drink again freely for a time, and then rest until the paroxysm of vomiting returns. Then drink again, and so on until the vomiting ceases, which will generally be the case within one hour. The feet should be immersed in hot water and hot fomentations applied to the stomach and bowels in the most thorough manner. If the extremities be cold, they also should be wrapped in hot cloths, and heat applied in every way to secure warmth to the whole body. We have treated cases of cholera, cholera morbus, bilious cholera and cholera infantum, in this manner with universal success. If attended to in the first stages, it usually requires but little time to give relief. Sometimes in addition to the drinking of hot water, we have used salt and vinegar; one tea spoonful of salt, one or two table spoonsful of vinegar, to one half pint of hot water; drink it

hot. This may be repeated three or four times, if the vomiting should not cease. Sometimes again, we use the hot ginger poultice over the stomach and bowels, instead of the hot fomentations. We prefer ginger to mustard, as it is less irritating, and when desirable, may be changed for the hot fomentation; whereas, mustard becomes so irritating, that in applying hot cloths afterwards the patient can not endure the smarting, therefore mustard, unless it give immediate relief, proves an injury by preventing the use of other remedies. The same objection holds true to the use of the blister from flies. You can not apply fomentations after blisters with any satisfaction.

The above certainly seems a very simple mode, for so grave and serious a disease. But it needs only to be tried to satisfy any one of its efficacy. How different this from calomel and opium, camphor and brandy, spirits of turpentine and cayenne, blisters and mustard cataplasms, all of which serve to reduce still more and more the failing strength of the patient. We urge every person to make a fair trial of these simple though efficient remedies, before he allows the use of those which have so often failed. One very important consideration in the course which we have here marked out is, its simplicity, and availability. Instead of being roused at midnight, and obliged to go perhaps a dozen miles, as the case may be, for a physician and medicine, you have your remedy at hand in every household. The fire and the water can be speedily prepared, and before a messenger could possibly notify a physician, the patient is in a fair way to recover if not already fully relieved. It will be seen that in our prescriptions we often direct the use of HOT water; which be it understood, we usually apply in the first or cold stage of a disease, and in that class of diseases which are always cold during the different

stages. Nearly every disease has its cold stage. Cholera is a cold disease and must be treated accordingly.

In closing this chapter, we wish to remark, that there are some diseases of the skin which, though contagious, will be treated under the head of skin diseases. We would also remark that this chapter is a very important one, as it will readily be seen that the most fatal forms of disease, if we except consumption, are found here. If parents and nurses will understand these subjects, and apply the simple remedies which we have here recommended, they will find themselves astonished and gratified at the results.

The treatment prescribed above answers equally well for cholera morbus, bilious cholera, and cholera infantum.

CHAPTER XVIII.

Fourth Group or Family.

MALARIOUS OR BILIOUS DISEASES.

Ague and Fever, Bilious Fever, Congestive Chills.

In this family are found those forms of disease arising from the decomposition of vegetable or animal substances. They are most common in new countries, in the neighborhood of swamps, mill ponds, marshes, and are produced frequently by the decomposition of vegetables in damp cellars, from stagnant water in vaults, and sewers; also from breaking up of new land, and in the vicinity of falls or mill dams, where the stream of water comes from swamps or marshes. Wherever the atmosphere is infected with this malaria it has a modifying effect upon all the diseases which afflict individuals in the vicinity. They are very liable to put on the bilious type. The liver seems to be the organ or gland, which first fails to perform its functions; the kidneys next, and when the disease assumes the acute form, there is a general prostration and inability of all the organs. The countenance becomes sallow, the tongue puts on a yellowish buff or fur, the eyes are tinged with bile, the skin dark and dry, the urine high colored and scanty, and the stools of the color of light clay. These symptoms, some or all, indicate a bilious condition, and in acute disease, we shall have this bilious type. Persons who are residing in a bilious climate, become so acclimated that they seem to live and enjoy very comfortable health, even in the midst of this poisonous malaria. But, those who have lived in an anti-bilious climate, and go to reside,

even a short time, in these regions, are almost certainly inoculated for a bilious disease. This may remain in the system for a long time before it develops itself in an acute form. But, it will be quite sure to do so sooner or later. We knew three persons, who went in the autumn, to a pond for the purpose of fishing in the evening, the waters of which were filled with malaria from decomposition of vegetable matter. Two of the three, were soon shaking with the ague; the third remained well until the next spring, when he also was prostrated with the disease, some six months after the exposure. We have known individuals go from a malarious district and reside in an antibilious climate, when in the course of from two to four years they would be attacked with the ague. We would say here, that so far as can be ascertained all the acute attacks of bilious disease, seem to be the vital efforts of the system to remove the malarious poison. This is a very important idea, and one that must and ought to have great influence in deciding the proper course of treatment. If bilious and malarious poison be removed by the efforts of nature in acute disease, then the course of treatment should be such as not to interfere with nature's efforts. A very serious question arises whether the course usually pursued in the treatment of these complaints, be in harmony with the efforts of nature? The operation of calomel, opium and quinine, have a tendency to derange the healthy action of the liver. Mercury in some form is generally supposed to be necessary in almost every case of bilious disease. The effect of mercury and other poisonous drugs, tends to produce liver complaints. The question is, whether an article or agent which will produce a disease of any organ, will, given in the same quantity, cure? We believe that it would be hard to prove the efficacy of mercury in the treatment of these bilious diseases. We hope to

see a more rational course pursued; and we believe we shall be able to present a course of treatment which will be rational and practical, and at the same time efficient, in the removal of these important ailments. They are not usually of a fatal character.

AGUE AND FEVER OR INTERMITTING FEVER.

This is the most common form of bilious disease in malarious climates.

Symptoms.—There are three stages of this disease, known as the cold, hot, and sweating. During the first stage the patient is feeble, languid, and indisposed to any bodily or mental effort. Some uneasiness at the pit of the stomach, and a general chilliness creeps over him. He yawns, stretches, and seeks the fire even in the warmest weather. The face and whole body is colorless and contracted; the skin rough, and elevated into hillocks called goose flesh; the cold becomes more and more intense until the patient trembles and shivers, teeth chatter, knees knock together, lips and nails turn blue, breathing is accelerated, and his pulse quick and feeble. Flying pains attack different parts of the body and all the secretions are dormant. Appetite fails, great thirst, bowels costive, tongue dry and white.

The hot stage immediately succeeds the cold. The shivering alternates with flashes of heat, the pallor departs from the face, the blueness from the lips and nails, and in a short time the face is flushed and turgid, the temples throb, head ache increases, pulse full, strong, and rapid, skin hot and dry, breathing deep and laborious, and the patient excited, restless and disturbed.

The hot stage passes to the sweating, when all the symptoms become changed, and the body again returns to its natural condition. The whole taken

together constitute a paroxysm of ague and fever.

These paroxysms may return every day, every alternate day, or every third day. Sometimes there seem to be great irregularity of symptoms; the paroxysms appearing two in a day, morning and evening, and the next day, the patient, though languid, will be free. These paroxysms may come on once or twice, and then entirely disappear, or they may continue to afflict the patient for months or even years. There is a great variety of agues which are masked or concealed, so that even an experienced physician may not detect the real difficulties. Sometimes the ague appears in the form of periodical head ache, neuralgia, or some other acute disease. It is often called dumb ague, when there is no shaking or regular paroxysm. These dumb or masked agues must be treated after the same general principles which we advise in all these forms of disease.

TREATMENT.—As we have given the cause of the disease, and shown that it was a poison received into the system, from the malaria arising from decomposed vegetable substances; the great question is how can that poison be removed? There are a great many substances which will "*break the ague*," as it is called, such as quinine, piperine, arsenic, peruvian bark, opium, brandy, and similar articles; but in this *breaking* of the ague very little is gained, as the disease soon returns, again and again, and often, after having taken large quantities of medicines for the purpose of *breaking* the ague, the patient is finally obliged *to wear it out*. These substances have merely the effect of stopping for the time being the paroxysms, without scarcely any effect of either neutralizing the virus or removing it. Just as soon as the effects of the medicines are fairly over the ague returns. And what is peculiar, the patient and friends are ever disposed to charge the relapse upon over-doing, over-eating or some

other error, rather than to the natural cause. So the patient is disposed to swallow more drugs with the hope of thereby getting rid of the disease. We do not say that no person is ever cured by these drugs, but what we wish to be understood in saying is this, that these cures are not in accordance with the indications of nature. It may be desirable in some cases to use some simple medicines to modify or even break the paroxysms, as we sometimes advise to do, but we can never depend upon this course of treatment for a cure. Therefore, whatever we may do by way of palliatives, we must ever remember to complete the cure by ridding the system of this poisonous malaria. This can only be done as nature indicates, by the skin, bowels and kidneys.

It will be observed that the closing or last stage of the paroxysm is sweating. This is generally profuse, and continued several hours. After the sweating the system becomes natural and quiet, and the patient feels comfortable until the next paroxysm, when the same symptoms return as before. With long observation we have come to the conclusion, that the sweating is the most important operation in the cure; that those who pass through the paroxysms without sweating, continue to have the ague much longer than those who sweat freely. Every one accustomed to the ague has observed that the exudations from the skin are of a peculiar odor, and stain the linen of the patient; also that the urine is high colored; and the evacuations from the bowels and kidneys are usually scanty and very offensive. Taking then these indications for our guide, we are prepared to see what ought to be done, and to enquire into the best mode of accomplishing it. *Water* is by far the most efficient agent of which we have any knowledge. We are aware that quinine is the medicine which is principally depended upon for the cure of agues. This medicine is a tonic, but

does not rid the system of the virus which produces the ague. Water, is both a tonic and antispasmodic, and serves to cleanse the system as no other medicine does, and at the same time will act as a tonic even more powerfully than quinine. The applications of water can be varied in many different way to meet the peculiarities of different cases, different temperaments and idiosyncrasies of the patients. Keeping the end constantly in view, which is to cleanse the morbid matter from the system, and remembering also the tonic effect, which must be ever observed to prevent the patient from extreme prostration; begin in the cold stage with the hot fomentations applied over the region of the liver and stomach. These should be used thoroughly until the chill is completely over, and the hot stage fully established. Then if the heat be very oppressive, we apply cool or cold compresses over the stomach and abdomen, or envelop the patient in the full wet sheet for an hour or more. The object is to shorten the first and second stages of the paroxysm. The patient may be allowed as much cold water as he desires to drink; if the fever should rage high, the whole body may be cooled, by pouring the back part of the head with cold water. This is done by placing a washtub by the side of the bed, letting the patient lie on the edge, with his head over the tub, face down; then with a bucket of cold water and a dipper, a thorough application may be made, cooling effectually the whole volume of blood, and the whole body. After the sweating is fairly established, the heat subsides, and the pains cease. We usually encourage and prolong the sweating stage unless the patient be greatly prostrated. Many persons suppose that a patient will surely be weakened by profuse sweating, and they are disposed to stop it as soon as possible. These persons forget that a man may work in the harvest field for hours, under

the most profuse perspiration, and continue day after day without exhaustion. All that is necessary to prevent exhaustion from sweating, is to give plenty of cold water to drink, and all the food the patient can digest in the intervals of the paroxysm. Also great care is to be taken to keep the brain from becoming congested. Sometimes when you wish to break the paroxysms with water, the chill may be anticipated by giving the patient about one hour before the paroxysm a cold plunge, shower bath, pail dash, or dripping sheet. Either way that a thorough shock may be given. Then, after a brisk and thorough rubbing, wrap the patient in flannels, putting the hot fomenter at the stomach, back and feet, or the hot compresses may be used without changing until the patient begins to be chilly. When this is thoroughly done, the chill will often be passed over and broken. Then we always advise a free sweating, and after this a sponge bath or dripping sheet out of cold water, if the patient be able to bear it. This process should be followed every day, until the miasma be eradicated from the system. The wet sheet pack may be used as a substitute, by letting the patient remain in it for one or two hours each day, until the system be free. The hot hip bath of 106° F. from fifteen to twenty minutes, is a favorite way of sweating with some persons, for this disease. So also the vapor bath. These can be followed by the cold dash or dripping sheet, or they may be tepid. As was said, there is a variety of applications, which can be made in any given case, by changing from day to day, as the circumstances may require, or any given process may be repeated day after day until the disease be removed.

There are feeble cases where the continuing of the disease seems to be attended with great prostration of strength, and some danger to life. In such cases if we do not succeed at once with water, we advise

the use of medicines to break the paroxysms; and then go on with the water treatment as before recommended. Different agents may be used for this purpose. We have been successful in the use of the tonic pills and give them the preference (see recipe). Take two of these pills every hour, for six times, immediately after the sweating stage has passed. These will not interfere with the water applications, and more or less may be given, depending upon the condition of the patient. The feeble and nervous require less. When the bowels are very inactive, one or two of the dandelion pills, taken every night, will serve to facilitate the cure, by carrying off the virus through the bowels. Also the juice of lemons may be used, or citric acid, to act upon the kidneys. One or two lemons may be taken each day. Strong coffee and lemon juice, will often break the ague, and is a very simple and safe remedy. Diluted nitric acid reduced by water, to about the strength of vinegar will answer to break the ague. But we prefer the other articles mentioned. There are a thousand and one remedies posted through the western countries, in the shape of cholagogues &c.; many of which contain injurious drugs, and are not desirable. Arsenic is a very common remedy in the form of Fowler's solution. But those who take arsenic (although it may break the ague), will not be restored to health. We strongly protest against the use of these powerful drugs. Better to bear the ague, until by a cleansing process the system can be rid of it.

Much might be said to those who dwell in a fever and ague district, in relation to their habits in preventing the disease. It is not necessary to go into particulars in this work, but we will say that during the summer and autumn, great care should be taken in regard to diet, beverages, and also to exposures, to night and early morning air. It is well known that a

white man can not go over some of the swamps in the south, during the evening or early morning, without the greatest peril to life. During the day he may cross them with impunity. So we find in all places where this miasma prevails, that the night air is much more deleterious than the air during the sunny part of the day. Another caution, no person should lie upon the ground in the sun or even in the shade where this miasma is generated. Food should be nourishing, but much fat meat or butter should be avoided. As to beverages, those articles should be avoided which contain much carbon, such as whiskey, beer and strong coffee. These are often prescribed to *prevent* the disease, but it will be readily seen that they will *cause* it by disturbing the action of the liver. To preserve the human body in health, is a very great art, but can and ought to be understood practically by every individual.

BILIOUS FEVER.

The next important form of disease in this group is *bilious fever.*

CAUSES.—The same causes which produce agues, will develop this form of fever. It is also produced by articles of food, which excite too much action upon that important gland the liver; such as fat pork, large quantities of sweet meats, too much food of any kind, strong drinks, and irregular habits of eating, drinking, &c. Also the emotions and passions play an important part upon the biliary secretions. A fit of anger will often produce a temporary bilious attack. Whatever tends to disturb the action of the liver may produce that state of the system known as bilious fever.

SYMPTOMS.—The attack is generally very similar to that of ague and fever. Pain in the bones, back

and head, coated yellow tongue, full bounding pulse, with chills and flashes of fever. As the disease progresses, the chills become less and the fever increases until the whole system is under the influence of the fever. After a few hours the fever remits, but does not entirely cease. This abatement of the fever lasts a short time, when it again returns, and the patient passes through another paroxysm. These in a common course, will return every day for a number of days, when they will cease, and the patient gradually recovers. There is often instead of fever, a looseness of the bowels, which is termed a bilious diarrhea. There are a variety of these bilious attacks, assuming somewhat different forms, but all belonging to the same class or type of disease. It is unnecessary to mark every particular symptom, but it is well to know the general characterisics, which have been already described.

TREATMENT.—As this form of disease spends its force more upon the liver, stomach and bowels, it is very desirable in the first attack to remove all extraneous, bilious, effete matter from these organs. As there is often sickness at the stomach and diarrhea, the first and best thing is, to give the patient hot water to drink, and also use enemas of warm or tepid water three or four times a day, if the bowels do not act freely, or if there be diarrhea. In drinking hot water, the patient should take from two to four tumblers very soon after vomiting, then rest for a little time, and if there be sickness, take two or three tumblers more when vomiting will ensue; if it do not take place, the fauces may be excited by the finger or a feather, when the water and bilious matter will be ejected. This vomiting may be repeated three or four times or more, unless the stomach become settled and quiet. After the vomiting ceases, two or three dandelion pills (see recipe) may be taken, to act on the liver, or if the bowels

be quite inactive, a more brisk cathartic will be found in the use of the senna and ginger (see recipe). During all this process, if there be chills or pain in the stomach, the hot fomentations may be used, producing a free circulation, and removing the chills. After the stomach and bowels are well cleansed, and the chills removed by the fomentations, the wet sheet pack should be used to remove the fever. This may be repeated once a day for about sixty minutes, followed by a dripping sheet at 70° to 80° F. The wet compresses may be worn day and night over the stomach and liver; these may be changed every hour or two, applied either cold or hot, as the state of the system may require. This disease, like the ague and fever, seldom proves fatal. The greatest danger to be apprehended is, that the disease will assume a typhoid form. This form is produced more commonly by pursuing a strong depleting course of medical treatment such as bleeding, purging and blistering. If the course we have prescribed be followed, we think there will be little or nothing to fear from typhoid symptoms. The diet should be simple; toast, rice, cooked fruits, or some simple articles, which are generally used for the sick. The appetite is usually wanting, therefore there should be but little food taken. The patient may drink freely of water, lemon water, or any tart drinks, without much sugar. In all acute forms of disease, exercise must be mostly suspended. Sometimes riding in an open carriage will be of service, but as a general rule, the patient will improve faster by rest, until the system is cleansed from morbid matter.

CONGESTIVE CHILLS.

This is an aggravated form of bilious fever, but belongs to the same type of disease. We treat it separately as it is the form of bilious fever which may be regarded as dangerous. It is important that persons who live in extreme bilious climates should understand the danger that may arise from sudden attacks of bilious fever. This disease often proves fatal during the first or second paroxysm. When there is a tendency to these sinking turns, as they are called, great care must be taken to prevent a severe attack. After *one attack*, *prevent* the *second* if possible.

TREATMENT.—The stomach and bowels should be well cleansed by the use of water, as prescribed in bilious fever. No drastic purges or debilitating emetics can be allowed. The dandelion pill (see recipe) may be used in a moderate way, or the senna and sage compound to secure a brisk action on the bowels for once or twice. At the commencement of the chills, the hot fomentations should be applied thoroughly, over the region of the stomach and liver. As the congestion takes place in the liver, this organ should be well stimulated with the hot compresses, until the chill is thoroughly removed. It is generally during the chill, the greatest sensation of sinking takes place. If this can be passed by, the danger is over for that day, or until another paroxysm which occurs usually in about twenty-four hours; sometimes it will take place in twelve hours. We should be always ready. If we be found off our guard, the disease may take us so by surprise, as to get the mastery of the patient before our remedial agents are brought into effiicient use. The drinking of hot water or hot ginger tea, are very useful in connection with the fomentations to prevent the chills and sinking. There are not usually more than two

or three of these sinking turns; after the third or fourth day, the danger may be regarded as past. Yet care must be had to prevent a return of the same symptoms. The tonic pills may be used (see recipe) during the interval of the chill, when there is great prostration. The general resort is to brandy and quinine; but the tonic pills are *much* superior. The hot water drank freely, is a diffusive stimulant to be used at the time of the chill, then the tonic pills after the fever is a little passed over, may be used, two or three every hour, or every two hours, for six or eight times. These will generally prevent the return of the chill, when the cure will be perfected by the usual mode of packing, and dripping sheets, once a day for two or three weeks.

There are other forms of bilious affections which will be treated more specifically under the next group.

CHAPTER XIX.

Fifth Group.

DISEASES OF THE LIVER.

Jaundice, Inflammation, Ulceration, Gall stones, Inflammatory Rheumatism.

These forms of disease are nearly related to the bilious, yet as they are produced from a variety of causes, it is proper to give them a separate division. *Liver complaint* may be regarded as a hackneyed term. Should a person be suffering, from whatever cause, if the difficulties be not at once apparent, the reply of the physician often is "Oh! you have the liver complaint," or "You have a torpid liver," or, "Some bilious affection," or such like answer; so that really a liver difficulty, either imaginary or in reality, is very common. The liver is in truth a very important gland or organ; its functions must be healthfully performed, to secure a healthy condition of the system generally. There are many influences operating to disturb and derange it; the atmospheric changes, the climate, food and drinks, the passions and emotions, all play an important part with the operations of the liver, and thereby frequently an *inability* of the organ to perform its functions takes place. It is not necessary for us to enter minutely into the causes of these affections of the liver, only to know that they are induced by various agents, such as food, drinks, climate, atmospheric changes, but especially by the taking of drugs and medicines. There is no more prolific source of "liver complaint" than may be found in the habit which many people

have of dosing themselves with physic every time they feel a little unwell. Much better to fast for a day or two, than to take cathartics. Mercury in the form of blue mass or calomel is almost invariably prescribed for liver difficulties; yet, we believe, that this is the *cause* of more liver difficulties, than many other agents put together. If the bowels be constipated it is laid to an inactive state of the liver, and a blue pill is prescribed; if the bowels be *relaxed* the liver is supposed to be in fault, and the blue pill still resorted to as the appropriate remedy; thus by this unnatural stimulation, what might have been a simple disease, becomes complicated and obstinate. We object to the use of mercury in liver affections, because of its evil tendency, and shall hope to prescribe a more rational and satisfactory treatment.

Symptoms.—In liver affections we usually find more or less pain in the right side, in the region of the short ribs, and also under the shoulder blades. The countenance sallow, tongue coated, constipated or relaxed bowels, appetite precarious, sometimes ravenous and then wanting, bitter taste in the mouth in the morning, lassitude, often great depression both of body and mind, stools clay colored, urine scanty and high colored or profuse and colorless, indigestion, flatulence, heart burn, bitter eructations, &c., &c. There is a great variety of symptoms connected with liver difficulties, to mention which would not greatly enlighten the invalid or nurse, as the course of treatment need not be essentially varied to meet the several symptoms.

Treatment.—For an inactive or torpid state of the liver, the general water treatment, in the form of hip baths, wet sheet packing, hot fomentations, compresses worn over the region of the liver, and water drinking, are generally efficacious in the cure. These must be varied according to the state of the disease. The diet must be carefully regulated,

usually taking large proportion of fruits and vegetables, with small portion of meats, sugar or butter. Acid fruits are preferable.

TREATMENT IN JAUNDICE.—This is a torpid affection of the liver, where the bile is carried through the system, giving the skin an orange color. The stools are destitute of the bilious color and odor, and the urine is often very high colored and scanty. There is a general state of drowsiness without pain.

In such cases we prescribe the hot and cold hip bath alternately the same day, and at the same time, by giving the hot from two to four minutes, and the cold about one half the time, changing from one to the other four times, commencing with the hot and ending with the cold. If the hot alone be used, the patient should remain in the water at about 106° F., for eight or ten minutes, then give the pail dash or dripping sheet at 70° or 80° F., being governed by the strength of the patient. This may be done once a day for several days; then change and give the wet sheet packing once a day, for an hour, more or less; or these may be alternated, giving the hip bath one day and wet sheet pack the next. The compress should be worn over the side constantly, renewing it three or four times a day. Or if it chill too much, use it nights only. Drink freely of water on an empty stomach, night and morning. The Congress and Empire waters of Saratoga, are very useful in cases of torpid livers and jaundice. Acid fruits as lemons, apples, &c., should be used freely, and fat meats, butter, strong coffee and tea, and alcoholic drinks must be entirely laid aside.

INFLAMMATION OF THE LIVER.

There is generally great pain in the side, loss of appetite, and obstinate constipation, sometimes diarrhea. In the first stage of the disease, when there are chills alternating with hot flashes, the hot fomentations applied until these chills are removed, will be found useful ; then the cold compresses, from ice water, and changed every hour or half hour if required, will greatly facilitate the cure. After the pain and inflammation are subdued, the cure can be completed by following the directions for jaundice.

ULCERATIONS.

In these cases we have a neglected inflammation, which has gone on to ulceration. The recovery will necessarily be slow, and the treatment may be varied to suit the various symptoms. The compress must usually be worn over the side constantly, well covered with cotton flannel or oil silk. The hip baths, temperature about 75° F., must be used once or twice a day for twenty or thirty minutes at a time. It may be used hot, occasionally 106° to 110° F., for ten minutes, followed by a dripping sheet at 70° F., and the pack may be used alternately with the above baths every other day. In home treatment, we expect that these may be varied to suit the cases. A few weeks spent in a hydropathic establishment would greatly facilitate a cure, and also give an opportunity for better understanding the course of treatment necessary to be pursued.

GALL STONES.

These are excrescences which are sometimes formed in the liver or gall bladder, to the great annoyance of the patient, and sometimes cost of life. They form from a torpid condition of the liver, when the

bile is too long retained. The passing of these gall stones through the gall ducts is often attended with excruciating pain. In this case it is decidedly easier to *prevent* than to *cure*. When they are formed the cure must depend in a great measure upon proper diet and beverages. Food which contains too much lime, as wheat, corn &c., must be avoided, and the diet consist principally of fruits and vegetables, with a small quantity of lean meat. The blood beet seems to be almost a specific for the disease. The juice taken two or three times a day, about one gill at a time, on an empty stomach, has cured some severe cases. This is also good in cases of gravel in the kidneys and bladder. During the passing of these gall stones through the ducts, when great pain is suffered, the hot fomentation applied very thoroughly, will afford more relief than any other remedy. The drinking of hot water freely, or the full warm bath, hot hip bath, or any bath that will thoroughly relax the system, will greatly mitigate the pain and facilitate the passing of the stones. After relief is obtained, a general course of water treatment will be necessary to prevent a return of the disease.

INFLAMMATORY RHEUMATISM.

It will be perceived that we divide rheumatism into two groups; one we treat under scrofula, the other, under liver diseases. This disease is generally divided into chronic and acute rheumatism; but we think the more natural division is into scrofulous and inflammatory. We believe inflammatory rheumatism has a direct connection with diseases of the liver; it seems to have its origin there; the direct cause being doubtless found in an acrid secretion from the liver. The remote causes are found in a variety of conditions and circumstances, such as

atmospheric changes; exposure to wet and cold, sleeping in cold damp sheets, over working, taking mercury, &c. There is a variety of causes operating to produce rheumatism.

Symptoms.—This form of disease begins like many other acute attacks, with chills and hot flashes; but in addition to this, we have sharp burning pains in some of the joints or muscles; generally the shoulders, elbows, wrists, hips or knees, are first attacked, and the pain and tenderness are of the most excruciating kind. When the attack is severe, it is almost impossible to move the joints, or even to bear the weight of the clothing. The fever is of the high inflammatory type; head aches, tongue coated, face flushed, and the patient often drenched in a sour smelling perspiration, and the urine turbid and scanty. This fever will usually run its course in two or three weeks, when the pains will gradually subside, perspiration become more natural or entirely cease, and the swelling in the joints abate. This is what may be termed a paroxysm of rheumatic fever. Usually after such an attack, the patient is *not fully* restored to as good health as before, but some soreness or stiffness of the joints remains. After a few weeks, months or it may be years, another attack similar to the first or more severe will take place, when the patient will be left in a little worse condition than before. So the attacks will be repeated more or less frequently, until the patient be entirely crippled. Some cases of extreme deformity are the results of these rheumatic attacks. Unless the disease be treated in a proper manner, these paroxysms will surely return. After these acute attacks, it is called chronic rheumatism; but the disease is the same, having its origin in the liver, and must be treated accordingly, to cure it. One thing is certain, the common drug treatment has generally proved inefficient in the cure of rheumatism. Physicians, for

the most part, are free to confess this. Not that the patient under this treatment will not go through the different stages of the disease and become better; this is the natural course, and will usually take place whether medicine be administered or not. But they can not prevent the attacks or greatly shorten the paroxysm. A man who was suffering from severe rheumatic pains, said to a physician who had been long practising the healing art, "Doctor, I have the rheumatism, can you give me something to cure me." He replied "No, I have had the disease myself for fifteen years, and can find no remedy." In examining medical books, we find such a motley mixture of contradictory prescriptions, that to follow them would require more skill than ordinary minds possess; and all this too, without a *promise of cure.* But under the water treatment we have a simple natural course, which has been tested for several years past, giving the most abundant satisfaction that the treatment is based upon true principles of pathology. We have treated a large number of rheumatic cases, and found that water was indeed a remedy upon which we could with confidence depend.

TREATMENT.—The indications of nature in the cure, are to remove the acrid matter, which produces the disease, by sweating. There is a profuse sour perspiration as one of the symptoms. In the treatment, this symptom may be regarded as the voice of nature, calling for aid in removing this acid. In some severe cases, we have known profuse sweating kept up for several days, and always to the relief of the patient after a certain time. To promote this sweating, let the patient either use the hot fomentations, the hot hip bath, or the vapor bath. The fomentations are the most convenient for domestic use. These should be applied over the

region of the liver and stomach, changing them as the case demands, until there has been sufficient perspiration for one time. This is to be determined by the strength of the patient. There should ever be the cold cloth on the head, and warm applications to the feet. After the foment the patient may receive the dripping sheet or sponge bath in tepid water, and remain quiet for a time in bed. If the joints should be painful and swollen, the compresses may be applied either cold or hot according to condition of the patient. Some are not able to bear cold water, who will bear the hot water well. Besides it requires great care in the use of cold water on the joints, from the tendency of the disease to transfer itself to the heart and lungs. This "metastasis" as it is termed, is common in young people and should be prevented; we have always succeeded in this, by the use of the cold compress over the region of the heart, when we apprehend danger. When there is great heat in the whole body, and it is desirable to use cold applications to the affected joints, the cold compress should be applied over the region of the heart first. The wet sheet pack used once or twice a day for one hour or more, followed by the dripping sheet, does well. Ever remember the disease passes off by perspiration. In medical books we often find this sweating objected to, and means prescribed to prevent it; but we believe that by so doing the patient lingers a long time, when he would recover, if the disease had its own course.

The dry blanket sweating is a favorite remedy with many. This can be used once a day for an hour or more at a time, followed as the others by the dripping sheet or sponge, in water at 75° to 80° F.

The hip bath we have used with decided advantage in cases of rheumatism to promote sweating. We

use the bath generally, from 106° to 110° F., for ten or twenty minutes, following it with the tepid dripping sheet. This can be used once or twice a day.

Also the vapor bath prepared by burning alcohol, or by putting hot stones or bricks into hot water placed under a chair in which the patient is seated, with his feet in hot water, surrounded with blankets. The latter is the safer way, and a very efficient one. It is not expected that all these baths will be used in any given case, but they may be varied, any one of them repeated day by day, or they may be alternated from day to day as the case may admit.

For internal treatment we advise the use of water freely. The drinking of cold or hot water, often promotes the sweating and facilitates the cure. When there is much derangement of the liver, and obstinate constipation, we advise the use of the dandelion pill (see recipe). Then we advise a free use of lemon juice, or citric acid. The juice of two or three lemons a day or one drachm of citric acid in a pint of water, taking two or three table spoons full at a time, every three or four hours, will operate favorably. The citric acid is one of the best preparations, in the name of medicine, for the cure of inflammatory rheumatism. We wish, however, to make a strong impression as to the efficacy of the water treatment in rheumatism. We might relate *many* important cases, but will mention *only two.*

A Mr. J. of C., had had a severe attack of inflammatory rheumatism which confined him to his bed nearly three months. When he recovered from the attack he found his shoulders were so stiff that he could not put on his coat without assistance. Thus he suffered for about one year, when he was again stricken down, more severely than at first. Under the former he was treated "secundum artem" after the best prescriptions of the medical schools; unde the latter attack he resolved to try the water

treatment. He was conveyed on a bed to the water cure establishment at Lebanon Springs, nearly helpless and in severe pain. We commenced the treatment with a full bath quite warm. The same day or the next, we gave him a vapor bath, seated in a chair, followed by a hand shower of tepid water. We gave him thorough sweating each day for a week; at which time he was able to walk up and down stairs without assistance. Feeling very well one day, his horses and sleigh being at the door, he jumped in, took the reins, and drove for about an hour. The exposure and fatigue were too much, and he was immediately seized with severe pains as at first. He was greatly discouraged, and feared his case was one which could not be permanently benefited by water. We applied the treatment again in the same way, giving thorough sweating baths each day, and in about five weeks from the time he first entered the institution, he returned home well. We succeeded in removing the stiffness from his shoulders, so that he was able to put on his coat without assistance. He remained well for years after.

Another case of W. J. P. of H., who had suffered for a long time with rheumatism, and at the time he came under our care, the physicians regarded the case as hopeless. It required a longer time in this instance to effect permanent relief, as his heart was seriously affected by the disease. But the water treatment as we have recommended above, was strictly applied, and the result was a perfect restoration. He has now been engaged for years in an active mercantile business in New York, taxing his powers to the utmost. He has since frequently spent a few days with us, for recreation, and at the same time enjoying the refreshing and invigorating effect of the water treatment. In neither of the above cases were any medicines used, nor do we consider them requisite in rheumatic affections. The medi-

cines employed by us are simple, and used only occasionally. We think the citric acid for rheumatism efficient and philosophical, nor have we ever known any injurious effects from it; but we regard the water treatment preëminent.

GOUT.

This disease is near akin to rheumatism, and can probably be traced to some derangement of the liver, occasioned by errors in diet. It more commonly attacks the extremities, but is sometimes transferred to the stomach, when it is considered very dangerous. It is a painful form of disease, the symptoms being similar to those of acute rheumatism. It is unnecessary to enter into a minute description of the symptoms; as persons afflicted with it can scarcely fail to recognize it.

TREATMENT.—The course of treatment to be pursued is very similar to that for rheumatism. Fomentations, hip baths, wet sheet packing, compresses and dripping sheets, are the principal agents in the water treatment. When these forms of disease have been of long standing, it is desirable to go to some water cure institution, in order to receive the whole benefit. The douche is of great importance in many cases, and a cure can scarcely be effected without its use.

DIET.—This disease is generally supposed to be the result of high living, and no doubt is produced either by hereditary transmission or personal indulgence. In such cases the path is plain. An entire change of food is desirable. Avoid meats, rich gravies and pastry and live principally on fruits and vegetables. Acid fruits have the same beneficial effects in this disease as in rheumatism. When there are chalky deposits in the joints, it is very desirable to avoid articles which contain lime, such as wheat,

buckwheat, and hard water, and use the acid fruits and vegetables, drinking soft water.

EXERCISE.—A physician once made this sage reply to the enquiry of a gouty patient as to what he should do: "Live on six pence a day and earn it." Exercise is an important agent in the cure of this disease. A celebrated physician directed one of the princes of Europe, who was afflicted with the gout, to procure a hickory club or maul, and beat the earth with it every day until a free perspiration should be produced. He required him to exercise with his bare hands, so as to extract the virtue from the hickory. The prescription was eminently successful. The prince was ever after disposed to praise the virtue of the hickory maul. This simply illustrates the importance of exercise. Let rheumatic and gouty patients, fully understand that EXERCISE is essential in the cure of these maladies.

CHAPTER XX.

Sixth Group.

DISEASES OF THE DIGESTIVE ORGANS.

Dyspepsia, Inflammation of the Stomach, Vomiting, Cholera Morbus, Diarrhea, Constipation, Piles, Strictures, Worms.

We have here a very important group, one which often gives great annoyance and distress; still these different forms of disease are not generally fatal. There is a large class of difficulties of this kind, more or less serious. The digestive apparatus is very important in the animal economy. Strength and endurance are derived chiefly from these organs. If in a sound healthy state, the animal, man or beast, will feel life and vigor in every part. But if diseased, all the powers droop, the mind becomes depressed, the moral sensibilities are usually morbid, and elasticity and strength depart from the whole man. Therefore it is of the utmost importance to maintain sound and healthy digestive organs. Many causes operate to disturb digestion; some of which are found in atmospheric changes, in our food and beverages, our clothing, our social and mental conditions, and in the cares and anxieties of business, &c. All these things are operating upon us, and serve to draw from the vital powers and retard digestion. He is a wise man, who is capable in this complicated piece of machinery to keep every part in good order. True, it has a self-adjusting tendency, yet there must be some understanding of the workings of the different parts to maintain a har-

mony in all the organs. We say again the stomach and bowels perform an important part in the manifestations of life. *Inability* of these organs is felt quickly through every nerve and tissue of the organism. In treating these diseases, we shall be confined directly to the parts affected. Our treatment would not interfere with other organs, as all the parts are fed and supplied from the stomach and bowels. The first form of disease we shall notice, will be one which has become so common that the term is almost as familiar as "household words."

DYSPEPSIA OR INDIGESTION.

In this form of disease, the stomach refuses to digest the food in part or wholly, and the whole system wastes for want of its usual supply of nutrition.

SYMPTOMS.—There is generally a feeling of distension of the stomach after eating, sometimes pain, distress, nausea, flatulence, constipation, cold hands and feet, heartburn, a sense of fullness in the head, wakefulness, mental despondency, irresolution, fickleness of mind, evil forebodings, &c. It is unnecessary to mention all the various symptoms arising from indigestion. The attack may be transient and pass away in a few days, or, it may be a permanent condition of the stomach.

CAUSES.—We enumerate among those which are the most prolific, the use of improper food, eating late suppers, the use of alcoholic drinks, tobacco, strong coffee and tea, taking strong medicines, eating too fast and without proper mastication, strong mental excitement, overwork, cares and anxieties, sedentary habits, and severe mental applications without giving the stomach time to perform its work.

TREATMENT.—In the hydropathic treatment, and

indeed in any other rational treatment, much attention must be paid to the causes of the disease. In vain we attempt a cure, while the causes remain in full operation. Having ascertained the cause as far as in us lies, and put it away, then we may begin to suggest treatment which will tend to repair the mischief already done. The disease seems almost to demand in the treatment an important division. Indigestion arising from the mind, which is termed *mental* or *nervous dyspepsia;* and indigestion arising from errors in diet, drinks, &c., termed *mucous dyspepsia.*

In nervous dyspepsia, the first thing to look after is the mind. Few persons are aware of the tax upon the vital powers from the mind. Many carry their business with them to their bed rooms, and to their tables, keeping up a constant draught, by continual thought, so as neither to eat nor sleep in a quiet manner as nature designed. This diverting the vital forces when food is in the stomach necessarily retards digestion; food is retained too long, becomes acid, the stomach is irritated, and soon we have confirmed dyspepsia. No one gains anything in time or money by robbing nature of her just dues. We are bound to do one thing at a time if we do it well. Therefore persons when they work, may work with all their might; but when they eat, they should be calm and not agitated by their business. They should eat slowly, masticate well, and mix the food thoroughly with the saliva. So also great care must be taken by business men, to secure a due amount of sleep; we would say seven or eight hours. If less be taken for any great length of time, the nerves become weakened, and dyspepsia is the result. One half of the cases of nervous dyspepsia would be cured or greatly mitigated, by observing proper hours for sleep and meals. Here also many run into extremes in the use of the water treatment;

believing it to be a good remedy, they allow themselves to use it to excess. In nervous dyspepsia water must be very judiciously used. The vital powers are reduced, and if the water be used too cold too great a draft is made upon the system, and the invalid instead of being made better, is evidently worse. Therefore we advise only a small amount of bathing, and that of the mildest kind. The system *should not* be taxed by using cold water; more depends upon proper hygienic and mental treatment, than upon the use of water. The invalid must control his mind; learn to eat slowly without agitation, and should lay aside the cares of business as he closes the day, so that his sleep may be undisturbed. Generally more depends upon his having good sleep, than upon any other one thing. Very moderate baths may be taken two or three times a day, in the summer, with plenty of friction, and perhaps two or three times a week in cool or cold weather. Again, the exercise should be moderate, many cases of nervous dyspepsia are seriously injured by too great an amount of physical exercise. When the nerves are weak, let the exercise be moderate; violent exercise being injurious, especially just before or after meals. Give the stomach an opportunity to do *its* work. The use of strong tea and coffee is generally injurious to the nervous dyspeptic. It is not usually desirable to drink at meals. But in some cases which have come under our care, a free use of hot water, taken with the meal or soon after, has been very serviceable. It may be taken with or without sugar, and we prefer it without; and as hot as can well be borne, making a much better stimulant for the stomach than *brandy*. Those who have proved it, know and appreciate its virtues. The common practice of prescribing brandy and gin in nervous dyspepsia, is an outrage upon poor human nature. We could relate some tales of horror from this prac-

tice, which if known, would cause physicians to stop and consider, before they ventured to prescribe these waters of death.

In mucous dyspepsia, we prescribe a different treatment. This species of dyspepsia is usually the result of errors in diet, and abuse of the stomach.

TREATMENT.—As in nervous dyspepsia, we must remove the cause of the complaint. In vain the prescription unless the invalid cease to do wrong. But when the habits are properly regulated, then the use of the water treatment in the form of hip baths, wet sheet packs, dripping sheet and compresses is invaluable. Some invalids laboring under dyspepsia, resort to the water treatment, as an assistant in breaking up bad habits. Water treatment has aided many individuals in attaining self-control. Habits of eating and drinking as well as the use of tobacco are often changed as by magic. Many persons break up the most obstinate habits of mind or body, by a well chosen course of water cure treatment; and all done too, without the suffering and inconvenience usually felt in making these changes. In mucous dyspepsia as well as in nervous, great advantage is secured by drinking pure water. When the stomach is acid, and there is fever, copious draughts of water, either cold or hot, on an empty stomach, is of great service. We have known instances where there was an aversion to the drinking of water, and the invalid abstained until the fluids of the body were thick and tenacious. In such case the mouth is dry and parched, and there is often a troublesome cough. If this state of the system be continued, it may end in consumption. The free use of water is a decided benefit in diluting the fluids, and removing this irritation from the throat and lungs. Obstinate coughs have been broken up in this way; it is a simple but efficacious remedy. Some prefer to drink the water on retiring. Obstinate con-

stipation is often removed in the same way, either by drinking water on retiring at night or on rising in the morning. The quantity should be from one to three pints, all taken within a half hour or hour. When food occasions distress in the stomach, relief may often be obtained by drinking freely of hot water. Physicians prescribe brandy as a stimulant, but they would find hot water safer and better. The hot hip bath, 106° to 110° F., for ten or fifteen minutes, followed by a cold dripping sheet for one or two minutes, is an excellent remedy for pain in the stomach or bowels. Also the hot fomentations, used for a half hour or hour, followed by the dripping sheet, give great relief. In ordinary cases of dyspepsia, the tepid hip bath for twenty or thirty minutes once a day; and also the wet sheet pack for one hour followed by a dripping sheet once a day, or three or four times a week, are valuable. When there is heat in the stomach, the cold compress worn over the stomach night and day, well covered with cotton flannel and oiled silk, will be found very beneficial. Some persons can wear the compress only a part of the time; better in such cases to wear it at night, and perhaps two or three hours at midday will do. The above prescriptions are for home treatment. For the cure of nervous and mucous dyspepsia in almost all cases these are sufficient. The means are simple, and may be applied without any great inconvenience, in almost any family. We hope the time will come when these simpler means will be duly appreciated, and sickness and pain so controlled, that suffering shall be greatly lessened.

The next difficulty of the digestive organs we shall notice is

INFLAMMATION OF THE STOMACH.

This disease may appear suddenly from colds, improper food and drinks, injuries, or from poisons.

SYMPTOMS.—Sharp pain, vomiting, retching, intolerable thirst, and hiccough, attended by great distress in the stomach.

TREATMENT.—In the first stages of the disease, while the chills are on, as is usually the case, apply the hot fomentations thoroughly, and drink hot water until the vomiting ceases. Also use warm or tepid water freely with the syringe. If these means fail, and the heat becomes general, and no mitigation arises from the use of the hot fomentations, or drinking of hot water, then we advise the use of cold compresses from ice water, and frequently changed. Also swallowing small pieces of ice once in four or five minutes. The ice should be continued without intermission for two or three hours, unless relief be obtained. This course will usually give relief if the first fail, which it seldom does. For chronic inflammation the treatment is similar to that of mucous dyspepsia.

VOMITING.

This affection is generally connected with other troubles, but sometimes seems to be almost by itself. It is generally caused by some improper article of diet, or by some acrid bile or mucus which has accumulated in the stomach.

The remedy is the copious drinking of water whenever nausea appears, until it be removed. The fomentations are important in these cases, if the difficulty should not be removed without.

CHOLERA MORBUS (*or vomiting and purging*).

This is sometimes a dangerous form of disease; but we never have had a case which we could not control by the use of hot water drinking, fomentations and injections. In the first place, cleanse thoroughly the stomach by drinking hot water. Then use the syringe, throwing the water as far as possible into the bowels, using two, three or even four quarts at a time. Then let it pass off, and if not relieved use the fomentation and drinking of the water again. After one hour more, unless relief be gained, use the syringe again. So continue until the stomach and bowels are cleansed, when the vomiting and purging will cease.

DIARRHEA.

In this we have no vomiting, but a thin watery discharge from the bowels. In the treatment we pursue a similar course as in cholera morbus, depending rather more upon the use of the syringe. We have known drinking pure water alone, to remove this difficulty in a very little time. It is, however, at times a very troublesome disease, and requires all the water cure appliances to check it. The use of the Congress and Empire waters, in connection with the water treatment, have often cured severe cases of chronic diarrhea. In cases where there is great irritability of the bowels, and nothing retained in them, the dysentery powders may be used as directed (see recipe). These powders may facilitate the cure and be used in connection with the other treatment. Brandy and opium are the great remedies which are usually prescribed in this complaint, but we think it better to trust to more simple means.

DYSENTERY.

This fearful disease of the bowels often rages as an epidemic in the fall of the year, and is sometimes alarmingly fatal, especially among children.

The cause of this distressing complaint is clearly traced to errors in diet, using crude and unripe fruits, or those partially decayed, or in eating too much and irregularly. Parents frequently do their children great harm, by allowing them to partake of nuts, apples and candies at all hours, regardless of the condition of the stomach. These evil habits often end in a severe attack of dysentery, which either destroys life, or very much weakens the powers of the digestive organs. Another cause of the disease arises from exposures to the chilling damps of the evening, as the weather begins to grow cool, in the latter part of summer or early autumn. The body should be well protected at this time, by warm clothing. The heat generating powers, which are always low in the warm seasons, have only begun to change to prepare for colder weather. In our first exposures, we are much more liable to be injured, than when the system becomes accustomed to the cold. With the influence of a poor diet, and these vicissitudes of temperature, the body fails to protect itself, and the mucous membrane of the lower bowel becomes the seat of a disease known as *dysentery* or *bloody flux.*

Symptoms.—In the first stages, we often notice only a simple diarrhea or watery discharge, not attended with much pain. As the disease progresses, the discharges become scanty, of a slimy character, tinged with blood, attended with a strong desire to be on the stool. In later stages of the disease, the bleeding is sometimes profuse, attended with severe griping and urgent desires to evacuate the bowels.

Often a little bloody slime is all that is passed. The stools become darker colored and offensive, a general fever attends, the patient sinks into a comatose state, frequently attended with a muttering delirium as in typhus fever. It usually runs its course in from one to two weeks; but sometimes death takes place in a very few hours, unless the disease be speedily arrested.

TREATMENT.—This disease like some others, requires prompt and energetic treatment in the first stages. It is desirable that parents and nurses should have some knowledge of the disease and its remedy. If a physician be not at hand, the disease may assume a fatal type, before anything efficient is done. Whereas, if the first symptoms be met, no great difficulty will be experienced. We would repeat what often has been hinted at in this work, that parents and nurses should understand the symptoms and nature of the different forms of disease, and be well versed in the use of simple remedies. Delays are dangerous, *in sickness.* The first thing we recommend is, to drink freely of hot water. It is a much better stimulant in these cases than brandy, and it also dilutes the fluids of the stomach and bowels, rendering them less acrid and irritating. Furthermore, if the stomach be overloaded, the water drank freely will produce thorough vomiting, which is very desirable in the first stages of the disease. Then the syringe should be used with a large quantity of tepid or quite warm water, removing as far as possible all effete matter from the bowels. This may be repeated after each evacuation, until the bowels are quite cleansed. Hot fomentations should be applied over the abdomen, in the region of the pain and persevered in until there is free sweating. The hot hip bath from 106° to 110° F. may be used in the place of the fomentations, for ten or fifteen minutes, followed by a tepid dripping

sheet. The body should be sponged in tepid water, two or three times a day, with thorough friction. The water for sponging may be used as cold as is agreeable to the patient. If what we have prescribed above, be thoroughly followed in the first stage of the disease, usually little or nothing more will be needed. But if the system fail to react, and the disease still progress, then in addition to the water treatment as above directed, take of the diarrhea or dysentery powders (see recipe), and use them as there directed. These will soon stop the discharges. Any druggist can prepare them. The fomentations should still be used over the bowels, until the skin acts freely. In these bloody dysenteries the powder many times should be used in the first stages, to prevent the loss of blood; as this is attended with great prostration. The diet should be simple; rice, toast, barley or arrow root are among the best articles. It will be seen, we depend upon *hot water* as a stimulant, instead of *brandy;* and it is important in the present state of the temperance cause. The medical use of brandy is very common in almost every form of disease of the stomach and bowels. In anticipation of the prescription of the physician, nearly every person now furnishes himself with brandy to be ready in case of emergency. Being thus furnished, it becomes very easy for people to prescribe for themselves. So we see the practice of using it is fearfully increased. Its awful consequences are sufficiently apparent. To drive this demon from the land, we must instruct the people how to heal their diseases, without resorting to brandy. If we succeed in this, the temperance cause will receive great aid. We say again the advantages of hot water as a stimulant over brandy are very great. It should be drank hot, and drank freely, and as a remedy it will be found much safer and more efficient. Also we object to the use of

opium in this disease. It is at best a "treacherous palliative," and the powders prescribed above will be found efficient without the narcotic influence of opium.

In some cases the disease may be checked immediately by the use of tannin injections. About one tea spoonful of tannin, in a gill of water, thrown into the bowels and retained, will often stop the disease as by magic. This should not be done until the water has been used as before directed.

CONSTIPATION.

This difficulty frequently alternates with diarrhea in the same individual. The best way to prevent a diarrhea is to remove constipation. This is done more effectually by regulating the diet. There is probably no more fruitful source of disease now in this country, than the dietetic habits of the people. A beneficent providence has crowned our land with plenty. This abundance of provision tempts the people to prodigality, and to devise various means to stimulate the appetite, that they may be able to devour more food. Instead of studying the wants of the system, the chief aim seems to be to pamper and gratify the taste. For this purpose various compounds, in the name of food, are placed, not only on the tables of the wealthy, but upon almost all the tables in every household. These articles are used not only as luxuries, but are made the common diet. Hence the derangements of the digestive organs, dyspepsia, diarrhea, constipation, &c.

We advise a return to simple habits, and let the rich pies, pastry, fruit cakes and plum puddings, be used as was designed, on special occasions as luxuries and not as daily food. Good unbolted wheat or rye bread stale, vegetables, wholesome fruits, plain meats once a day, without partaking of too great a

variety at the same meal, would in most cases overcome this tendency to constipation.

Little idea is generally entertained of the amount of suffering which results from bad habits in diet. The simple difficulty of constipation becomes a fruitful source of complicated diseases, such as liver complaint, rheumatism, consumption, piles, &c.

It becomes very necessary, therefore, that this difficulty should be removed. As a general rule every person should secure a full and free movement from the bowels once every twenty-four hours. In some cases once in two days will answer. A carefully selected diet will usually secure this result. If this be not sufficient, then recourse should be had first to the drinking of pure water, on an empty stomach ; from one to two pints before breakfast, or a part of this quantity may be drank on retiring. Should this fail, a wet compress may be worn over the stomach and bowels at night well covered. If still unsuccessful, use once a day tepid water enemas, or use the dandelion pill (see recipe), one at night more or less as may be required. There is still another remedy more simple and perhaps preferable to the last mentioned, which is wheat bran. Take pure wheat bran, about one or two table spoonsful in a gill of hot water, sweeten if you choose, and drink it twice a day on an empty stomach. This is a very sure remedy, and one which often, after using for a time, will regulate the bowels. The bran can be obtained by sifting it from graham flour. Or another way to prepare this bran, is to take one bushel of wheat, grind and bolt it; then take the bran and put it into another bushel of wheat, and grind it very fine, thus having the bran of two bushels in one, and use this last for making bread, cakes or wheat mush, for those who need it. Ladies, who have been severely afflicted with constipation, have told us they would not take a thousand dollars

for this knowledge of the use of wheat bran. Figs and senna may be prepared to give relief, but it is only temporary, while the bran is generally permanent.

Persons troubled with constipation, should have plenty of out-of-door exercise. The calls of nature should be regularly and carefully attended to. Those who are careless in this respect, will be very sure to form bad habits, which will result in disease.

PILES.

These are of two kinds, the external and internal. They are small tumors which form on the lower part of the bowel. These tumors are often a source of great pain and annoyance, and sometimes even of danger to life by frequent and excessive hemorrhages. They are usually caused by constipation, or nature uses them as an outlet for vitiated humors of the body. Physicians often dissuade their patients from curing these piles, lest some more serious disease should be the result. This might be good advice, provided no pains were to be taken to restore the general health. But, to allow the system to waste its strength by such a drain, is equally pernicious with the habit of taking a portion of blood each day or week from the arm. In either case the vital powers are essentially weakened and life shortened.

When piles are the result of constipation, generally, all that is necessary, is to remove that complaint. If they be the result of some scrofula, lurking in the blood, then it will require the treatment recommended for scrofula. The hip baths shallow and cold are of service in giving relief. When they are very painful and swollen, ice applied in a napkin to the parts will give relief. The elder ointment (see recipe) will be of benefit in allaying heat and pain. The stramonium ointment will give ease where there

is *great* pain. The powdered nut gall, made into an ointment, will often remove the tumors. There are other things which may be used to give temporary relief, but for the cure we should depend upon the restoration of the general health.

STRICTURES.

These are situated in the rectum above the sphincter muscles. They sometimes give great trouble in preventing the fæcal matter from passing down. In simple cases they may be removed by the use of warm water enemas. When obstinate they become surgical cases, and must be removed by the use of rectal bougie or surgeon's knife. The rectal bougie in most cases will be effectual. This can be had of a surgical instrument maker, and may be applied by the patient once or twice a day, pressing it into the bowel above the stricture, then lying quietly an hour or more. In the country a bougie can be readily manufactured by taking a smooth stick, about ten inches long, and covering it over with melted beeswax until it is of the size of a person's thumb. These are not very common cases, and when they are severe will require the attention of a surgeon.

WORMS.

These creatures usually infest the stomach and bowels, and are more common in children than in adults. They are usually caused by improper diet, taking too much sugar, &c. It may not be very clear whence they have their origin. They can generally be removed by giving attention to the diet of children. A very common remedy, and one perhaps as simple as any, is the giving of sweetened milk to the child on an empty stomach in the morning an hour before breakfast, two or three times per week. Then

in the morning give strong sage tea, or a tea spoonful of pulverized sage in a little syrup. The sweetened milk will keep the worms from troubling the child, and the sage will kill them. The black alder given in a strong tea, on an empty stomach, two or three times per week will often kill the worms. In very severe cases when they have been neglected until there are great accumulations, some more powerful remedy like cowhage may be required. A half teaspoonful of cowhage in a tablespoonful of syrup, well mixed, and taken on an empty stomach in the morning, followed at night by one or two of the dandelion pills will remove them. This may be repeated once a week until the cure is effected. To maintain freedom from these annoyances, our chief dependence must be upon the use of proper food.

CHAPTER XXI.

Seventh Group.

DISEASES OF THE KIDNEYS AND BLADDER.

Inflammation of the Kidneys, Bladder and Urethra; Stranguarly, Strictures, Gravel, Diabetes.

In this family we have some of the most troublesome, but not generally fatal diseases.

Causes.—These are various, but can usually be traced to colds, atmospheric changes, miasma, wounds, or some imprudences.

INFLAMMATION OF THE KIDNEYS.

Symptoms.—Pain in the back and loins, scalding of the urine while passing, pain in the head, frequently nausea and sickness at the stomach, weariness, depression, chilliness and flashes of heat. The most marked symptoms which distinguish it from other diseases are pain in the back and scanty painful passages of urine. These symptoms will apply to inflammation, both of the kidneys and bladder. But when principally confined to the bladder, there is less pain in the back, and more difficulty in the passing of water.

Treatment.—For inflammation of the kidneys and bladder in the first stages, while there is severe pain and chilliness, the hot fomentations may be used advantageously. These should be applied thoroughly over the region of the pain, changing as they cool, for one or two hours, or until the whole system is

thoroughly relaxed and brought into a free perspiration. We generally advise a continuance of this process for several hours. Then sponge or use the dripping sheet. If the pains return the same process should be repeated. When the inflammation is chronic, the hip baths at 85° to 90° F. for a half hour or more, are suitable. Should the fever be high, and no relief obtained by the fomentations in an hour or two, we advise cloths wrung out of ice water, and changed every fifteen or twenty minutes until relieved. In ordinary cases the one or the other will be effectual. In cases of long standing the general course of water treatment by hip baths, wet sheet packing, and compresses must be pursued. This, followed carefully, with a diet well chosen, mostly of fruits and vegetables, will conquer these difficulties We recommend also the free use of a tea made of slippery elm, flax seed, or of the common garden parsley.

INFLAMMATION OF THE URETHRA.

This is the duct for the passage of the urine. The treatment would be the same as we have recommended for the kidneys and bladder. The copious drinking of water for a time to dilute the urine, then abstaining entirely for several hours so that the parts may rest, will sometimes give great relief. Mucilaginous beverages should be used as recommended before; the balsams also and nitre. (See recipe and use according to directions.) The diet should be very simple and unstimulating, and the exercise must be very moderate. In acute cases we enjoin perfect rest.

STRANGUARY.

This term signifies a difficulty in passing water. It is occasioned by a stricture or spasm in the urethra, or by a stone in the bladder, which partially or wholly closes the passage.

TREATMENT.—In cases of stricture the parts must be thoroughly relaxed. The hot fomentations or warm hip bath, are the best for this purpose. In some cases no relief can be obtained, except by the use of a catheter, and a surgeon should be employed. But the baths will often accomplish it when other means fail. Should there be a stone, relief may usually be secured by lying flat on the back, thus causing the stone to change its position.

STRICTURES.

By these we have a partial closing of the urethra caused by inflammation of the passage. The cure can be effected usually, by the use of hip baths, which remove the inflammation, or by the careful and continued use of the metallic bougie. The use of this instrument would require the attention of a surgeon.

GRAVEL.

TREATMENT.—The copious drinking of pure soft water, either rain or distilled, is an important remedy. The use of hip baths and compresses, and in fact, all the appliances of the water treatment, to correct and remove vitiated secretions, which are the cause of these lithic formations, will be found useful. For specific effects we have received great satisfaction by using the juice of the blood beet. This may be prepared and used as directed for gall stones.

Another, a syrup made from the stone root and

bark of the sasafras root (see recipe and use according to directions). This syrup will aid much in removing difficulties of this kind from the kidneys and bladder.

DIABETES.

There are two kinds called simple and mellitus. The simple is an increased flow of urine, with little or no color, and is attended with no pain, but is very debilitating. The diabetes mellitus usually gives a large flow of urine, with or without color, and containing sugar in solution. This is considered a fatal form of disease. We have treated both kinds with success.

We use the hot water treatment, more than the cold. The object is to restore action to the skin, which is always dry, cold or feverish. The hot hip bath, 106° F., eight or ten minutes, followed by the dripping sheet, is useful in this disease; and also, the half bath about 75° to 80° F. In the warm season the wet sheet packing has a very soothing, restoring influence; also, cool and even cold hip baths, may be used for a change. The diet should be well chosen. Physicians generally prescribe a meat diet, but we have never been able to see any great advantage in this. Good nourishing vegetable food does quite as well as the stimulating influence of meat. We have now under treatment a case which has been treated by a skillful physician, with the usual remedies and meat diet, until he was scarcely able to stand alone. He passed an enormous quantity of urine, frequently six quarts during one night, and as much in the day. His feet began to swell, and his whole system showed signs of speedy dissolution. In this situation we began the water treatment, taking from him his tonics, spirits and much of his meat diet; and giving him milk, rice, eggs

and stale bread, with beef steak. He began slowly to mend. It is now six months since he commenced the treatment. The bloating is gone; and the urine reduced to about two quarts at night and the same during the day; the strength is gradually returning; his appetite natural, and his bowels quite regular. We can not say that this case will recover; but we say that it was regarded as perfectly hopeless when we undertook it. His *improvement* gives great satisfaction that the treatment is judicious and efficient in such cases. The course pursued has been mostly hot hip baths for eight or ten minutes, followed by a pail dash at 80° or 90° F., a half bath from 75° to 85° F., and a fomentation and pail dash. He has generally taken two baths a day, the hot hip and half bath, or the fomentation and half bath. This is regarded by all who have known it as a remarkable case of improvement. In simple diabetes, a tea made of chamomile flowers and sage drank freely will be of service. Also white resin and loaf sugar pulverized in equal parts, taking one half tea spoonful three times a day, will aid materially in reducing the quantity of urine.

In diabetes mellitus, besides the water treatment we have found the white resin and loaf sugar useful. Also pepsin, formed by taking a good rennet, soaking a small quantity in water, and let the patient drink of it daily. It should be made daily, or once in two days, to keep it fresh. This disease does not seem to be connected with the bladder or kidneys, but with the digestive apparatus. We speak confidently that these cases may be relieved unless too far advanced.

CHAPTER XXII.

Eighth Group.

DISEASES OF THE SKIN.

Salt Rheum, Elephant Skin, Itch, Warts, Moles, Corns, Bunions, Moth or Leprosy.

These are much more troublesome than dangerous. The annoyance which they give by night and day, constitute their chief importance, although some of them are regarded either as dangerous, or as the foundation of other difficulties, which make them dangerous in their primary relations. The skin regarded as an organ, is of great importance in the animal economy. It is said that five-eighths of all we eat and drink, find an exit from the body through the skin. If then this function of elimination be impaired, we may conceive somewhat of the mischief which will ultimately follow. Every organ of the body will be more or less disturbed by this failure of the skin. It is then of great importance, that we secure a healthy action of this organ. In treating of these, we shall endeavor to give brief directions adapted to the difficulties.

SALT RHEUM.

This, although a skin disease and an important one, we have classed with scrofula, and given specific directions under that head for its treatment. We will add, however, that there is a species of salt rheum on the face which can often be removed by

the use of a little chloride of lime dissolved in pure water and not strong enough to irritate the skin and applied with a soft sponge once a day, usually on retiring.

THE ELEPHANT SKIN.

This is so called from its rough and scaly condition. It impairs materially the functions of the skin by closing the pores. This is removed by the sweating baths, and washing the skin with a weak solution of the chloride of sodium, or the chloride of lime. Sulphur vapor and electro-chemical baths will usually cure this complaint. Ring worms may be cured with sulphur, chloride of lime, or chloride of sodium.

PRURITES OR ITCH.

This is a contagious disease and belongs to that family, but as it is a disease of the skin and not regarded dangerous we have placed it in this group. The affection evidently depends upon a small animalcule which burrows in the skin, and is not seriously disturbed by the use of water. The water treatment alone *will not cure* this disease, although it is very essential in *perfecting* a cure.

Sulphur seems to be the antidote, and if properly applied is safe. The citron ointment, found at any drug store, is a safe and certain remedy. Great care should be taken to *cure* and not to *repel* the eruptions. The root of yellow dock made into an ointment with sweet cream or fresh butter, will destroy these animalculæ. A tea or syrup should be made of the root and drank at the same time. Thorough cleanliness is enjoined. When the ointment is applied at night a warm bath should be taken in the morning, using freely of soap. The disease may be speedily removed with proper attention. The daily bath will

usually prevent it from spreading. If allowed to continue, or repelled from the skin by careless or improper treatment it often becomes the source of serious and protracted internal disturbances.

WARTS.

These excrescences scarcely obey any known law in appearing or disappearing. They sometimes are found in great numbers on the hands and feet, and are more or less troublesome, when of a sudden they will be removed without any known remedy. A wash made of the bean leaf, or white oak bark, applied daily is considered a remedy. It is safe and easily applied. When a wart must be removed, a remedy can be found by taking equal parts of nitric and muriatic acid, mixed, and applying a very small drop directly to the wart. Let it remain five or ten minutes, then apply a strong solution of soda or saleratus to kill the acid. A few applications daily in this way will kill the wart. A mole may be destroyed in the same way, or these may be removed by aligature.

CORNS AND BUNIONS.

These troublesome excrescences appear on the joints, or between the toes, and are at times very painful, and the cause of much suffering. They are produced by pressure upon the parts, either by boots being too tight, or not fitting the foot. They can frequently be removed entirely by using a daily foot bath of ten or fifteen minutes. A more sure remedy, however, is found in the use of the nitric and muriatic acid, applying a small drop and letting it remain for ten or twenty minutes, then using a solution of saleratus to kill the acid. After this, carefully remove all the dead skin and you will be able to extract the

part which causes the pain. We have removed many a troublesome corn in twenty minutes. Sometimes they will return again, when the same process being repeated finally exterminates them. This operation is performed without causing pain.

Bunions may be removed by the same remedy. When there is much soreness take a piece of buck-skin, or any soft leather, cut a hole through it, and spread on some adhesive plaster, and so arrange it that it will take the pressure of the boot or shoe from the corn or bunion. This will be a great relief and facilitate the cure. Soft corns between the toes may be treated in the same way. They only require a little more care and skill.

MOTH OR LEPROSY.

This is a species of skin disease found frequently in bilious climates, and seems to be caused by some derangement of the liver. It makes its appearance upon the skin in irregular dark brown patches, occasionally of a yellowish hue, chiefly upon the neck and body, sometimes upon the face and extremities. It causes a dryness in the skin with considerable itching and irritation, especially when the body is heated. The excreting functions of the skin are disturbed by this disease, therefore the necessity of its being removed.

TREATMENT.—The compresses and wet sheet packing are useful and generally efficient. But the difficulty may be removed without any danger or delay by using a strong solution of citric or oxalic acid. Take the salts of either of the above acids, as much as will dissolve in a gill of pure water, and apply with a soft sponge or cloth to the parts affected. This prescription has caused the hearts of many to rejoice. The application may be made at night and

washed off in the morning. It may be used in full strength, but if it irritate the skin, it should be reduced. As you need not be in haste, begin with a weak solution and increase the strength as can be borne.

There are other forms of skin diseases, such as rose rash, nettle rash, &c., which are cured without difficulty by the wet sheet packing and other water applications.

CHAPTER XXIII.

Ninth Group.

DISEASES OF THE HEART AND ITS APPENDAGES.

Pericarditis, Enlargement, Atrophy, Dropsy, Ossification.

As the heart is the centre of the circulating system and regarded by many as the seat of life, anything which disturbs its functions necessarily gives alarm to the individual. A disease of the heart is, therefore, considered serious and important. There are, however, many ailments of the heart which are not very serious except in the imagination of the patient, and may be easily removed by a judicious course of treatment. Many of these difficulties are entirely sympathetic. Other organs, and especially the stomach, become affected and the heart is disturbed in its operations by sympathy. We do not expect to enter very minutely into a description of these forms of disease and shall give only simple directions for the treatment. Many cases will require more skill and care in the treatment than every person can be expected to possess or bestow.

PERICARDITIS,

Or, Inflammation of the Pericardium.

This form of disease is frequently caused by rheumatism changing from some other part of the body to the heart. It is exceedingly painful and produces great disturbance in the circulation, and difficulty of breathing. The heart often enlarges very suddenly, giving a sense of suffocation, attended

with severe palpitation and stricture about the chest. This palpitation is caused by a derangement of the valves so that the blood regurgitates and is thrown back upon the heart, giving to the lips a purple hue. When the disease continues it becomes quite dangerous. It should be treated promptly, and if no organic change has taken place will be cured without great difficulty. But if the valves become thickened and hardened the disease will be difficult to control.

TREATMENT.—In the first attack it should be met with the hot fomentations over the region of the heart, and at the same time hot foot and hand baths should be used to invite the blood to the extremities. The patient should be kept quiet, and all exciting stimulants either in food or drinks avoided. If after using the hot fomentations awhile no relief be obtained, they should be changed to cold. Care must be used in making this change to ascertain whether the heat of the body is above the natural standard, in which case the hot fomentations sometimes rather increase than diminish the pain. Then we would advise the cold applications. Thus observing conditions, changes may be made from hot to cold, and from cold to hot with impunity, using either long enough to determine the effect. In these cases it is desirable, while the cold is being applied to the region of the heart, that the hot fomentations should be used upon the legs and arms thoroughly, to secure a free circulation to the extremities. The hot cloths upon the extremities may be desirable without making any direct application of either hot or cold to the region of the heart; the object being to draw away the blood from the heart and lungs, if possible, to the extremities. After relief is obtained, great caution must be observed to prevent the return of the difficulty. When the disease is rheumatic, and can be changed to other organs, then the cool

or cold compresses over the region of the heart will usually prevent it from returning. We have had severe cases of this disease, and given relief by the use of water as here recommended, when the best physicians had pronounced the cases hopeless. After the acute attack has passed, the case should be treated for some time by the hip baths, dripping sheets, packs, &c.

ENLARGEMENT OF THE HEART.

This is usually the result of inflammation, and must be treated on general principles. No *direct* application can be made, to reduce the size of the heart, when the enlargement has been of long continuance; and yet the water cure treatment, by equalizing the circulation, and removing morbid matter from the system, will give more relief than can be secured by any other means. Medicines are generally of no great account in treating this disease. Food should be nourishing but not stimulating. Exercise should be moderate, and care taken to avoid any sudden excitement, either of body or mind. Probably more sudden deaths occur from this disease, than from any other. Persons who labor under this affection, should know what they can bear. With proper care some people live for a long time, with serious disease of the heart, and even when there is great enlargement, by due attention, they may continue for years, and the size of the heart be actually diminishing.

ATROPHY.

This is a wasting of the muscles of the heart, occasioned by the want of nourishment. Very little can be done except by the way of general hygienic means. Exercise in the open air, proper bathing,

and good food, are the means which must be depended upon for a cure.

DROPSY.

This difficulty is the result of inflammation of the pericardium. The water accumulates in the heart case and seriously disturbs the functional operations of that organ. It sometimes increases so much as to produce great distress, and even death. This is a difficult disease to treat successfully. We have had a few cases which were considered hopeless, and restored them by the use of the water cure treatment and some simple medicines.

TREATMENT.—We have found the fomentations used over the region of the heart and stomach, to work pleasantly. Also the hot foot and leg baths to secure a good circulation to the extremities are useful. Either the fomentations or hot hip baths, to secure a free perspiration, are the great remedies. The patient should not be exhausted, but allowed to receive enough of tonic treatment, by the tepid dripping sheets or hip baths, to keep up his strength. We have had patients rapidly improve in strength, while we were giving them, at the same time, thorough sweatings each day. In addition to the water applications, make a tea of the common milk weed, by taking a handful of the fresh roots, bruising them, and pouring on a pint or quart of pure water, either cold or hot. This should stand for an hour or two, and then be taken (about one half gill at a time) six or eight times during the day, as the patient may be able to bear. It is somewhat nauseating, and will act as a powerful diuretic, carrying off freely the water. If the stomach will not bear it in water, the root may be put into best Holland gin, and, the patient use one or two teaspoonsful, three or four times a day. A tea of the dwarf-elder root, used

freely is of some service in carrying off the water. But our dependence must be in the water treatment, stimulating the organs to act, that the water may be removed by the natural operations of the system. The compresses may be worn night and day, over the region of the heart, keeping them so covered as to prevent a chill. Physicians often prescribe powerful and active medicines; but this only serves to reduce the system, and gives, at most, only temporary relief. Avoid active cathartics, and be careful to keep up the strength. If the medicines we have prescribed fail, more active medicines will generally fail. The diet should be nourishing, and the exercise of the passive kind; avoiding all violent emotions and exercise.

OSSIFICATION OF THE HEART.

In this disease there are bony deposits in the heart, valves, arteries, or veins near the heart. These deposits are doubtless the sequel or results of inflammation, or rheumatism of the heart. After this difficulty is once fully established, very little can be done by way of treatment: prevention, is far easier than effecting cures. This disease is evidently, the consequence of inflammation, and rather difficult to detect; even physicians, are often mistaken with regard to it.

Symptoms.—There is usually a peculiar sound about the pulsations of the heart which gives more decided intimation of the malady, than any other symptom.

This souffle or purring sound, can not, however, always be depended upon as an evidence of ossification, for we find similar symptoms, when the valves of the heart are a little thickened by inflammation and other difficulties. There is generally labored

breathing, with flushed countenance, lips pale or purple, but, the invalid, being usually fleshy, sometimes presents the appearance of robust health, even when the disease is far advanced.

TREATMENT.—Great care must be used to avoid excitements and violent exercise. The diet should be of the simplest kind, consisting mostly of acid fruits and vegetables, with such other food as contains but little lime or earthy substances. As a beverage, soft water should be taken (see chapter on diet). Baths may be used, carefully applied, so as not to shock the system.

CHAPTER XXIV.

Tenth Group.

DROPSIES.

Anasarca, Ascites, Hydrothorax, Dropsy in the Head.

In this group, we have the sequel of acute attacks, or the results from improper management of them. Therefore in the treatment of these difficulties, we are not contending so much against disease in its acute forms, as endeavoring to repair the mischief which may have been caused by acute disease, or improper treatment.

This is considered a very stubborn family, and, but little is usually done for it by medicines. Possibly, the water treatment may fail in many cases, but we have treated a number with success.

ANASARCA,

Or, General Dropsy.

With this form, the accumulation of water is in the cellular tissue of every part of the body. All the organs are more or less oppressed, and there is great prostration of the whole system. The accumulation is sometimes very rapid, as after scarlet fever; and at other times it is very slow in its progress, commencing in the feet perhaps, and continuing to increase for years.

Symptoms.—Should this be the result of scarlet fever, see it already described under that head, with directions given for treatment. Usually, the symp-

toms are as varied as the causes. Dropsy never appears until the health is impaired. The only symptom necessary to be observed, is the swelling of some part of the body; the feet are usually first affected, and these are also often swollen in cases of debility; and again, in last stages of some serious disease, such as consumption.

Whenever we find the body beginning to bloat in any part, we have a symptom of dropsy. This bloating is not the same as that which attends upon inflammation, but is an enlargement of the parts without pain, and usually without redness. This may appear in the latter part of the day, and disappear in the morning, after having rested at night. Eventually the swelling becomes permanent, and the body gradually enlarges, the organs becoming more and more oppressed, until the heart and lungs cease to act.

TREATMENT.—In treating dropsy, it is necessary that we inquire carefully into the cause; this being ascertained, our next step is, if possible, to remove it. We hold that inflammation always precedes dropsy, therefore, in order to remove the dropsy, we must, so far as possible, bring the system into the same condition, as during the feverish or inflammatory state; this having been effected, the membranes will cease to secrete water, and the progress of the disease will be arrested; but we must go a step farther, *to cure;* we must remove the water which has already accumulated. To do this, the sweating baths will be necessary; *the vapor, dry blanket, hot wet sheet pack, hot hip bath,* or, *electro-chemical bath,* either of these once a day, followed by a tepid dripping sheet, or half bath, will be all that is requisite in the way of water treatment. Invalids, suffering from this complaint, should avail themselves of judicious medical advice.

Various articles of medicine, will aid somewhat in

removing water from the system; and of the several kinds employed we prefer the common milk-weed root (asclepias syrica), used as before directed for dropsy of the heart. Also, the wandering milk-weed (apocynum canabinum). Use either the root, made into tea, or the powder; use the tea moderately. Dose of the powder about five grains once or twice a day. The extract combined with cayenne, made into a pill, is celebrated for curing severe cases of dropsy. It may be prepared differently if preferred. The medicines can be used with water treatment, without interfering with each other.

ASCITES,

Or, Dropsy in the Abdomen.

In this variety of the disease we have the accumulation of water almost, or wholly, confined to the cavity of the abdomen, either diffused through the cavity or confined in sacs. It is, as in other cases, the result of inflammation;—there are sometimes enormous accumulations, even from three to six gallons! The same causes produce, and the same peculiarities attend this, as the other varieties.

Treatment.—The same course should be pursued as directed in general dropsy, both as to water treatment and medicines. It is sometimes necessary to draw off the water by tapping; in these cases a surgeon will be required to perform the operation. In the course of twenty-four hours, or, so soon as the wound is healed, very thorough treatment should be adopted to prevent the water from again accumulating. We have been successful in cases of this kind, and the patients have recovered after the water had been drawn the second time. The extract of wandering milk-weed and cayenne is considered particularly adapted to this species of dropsy.

HYDROCEPHALUS,

Or, Dropsy in the Head.

This species of dropsy is confined mostly to children, and results from the inflammation of the brain. Children, while teething—owing to improper diet and other causes—are often troubled more or less with inflammation in the head ; it may be very slight, and yet sufficiently severe to change the healthy state of the membranes, so that dropsy will ensue. If *parents* were aware of the effects or consequences of these bad habits, they would no doubt exercise a more watchful care over their children. Again, did they realize that these dropsies in the head *could be prevented* by the water treatment, they would acquaint themselves thoroughly with the means and mode of preventing and curing this disease.

Symptoms.—Heat in the head, child stupid or very irritable, glossy and marble like appearance of the forehead, pupils of the eyes enlarged, &c., &c. It is unnecessary to enter minutely into all the symptoms, as the heat in the head demands our first attention, in order to prevent an accumulation of water. After water has accumulated, very little can be done to advantage. Still, as we know not the precise turning point of the disease, everything in our power should be done by way of prevention, as well as cure.

Treatment.—In the first stages, even when the heat is but slightly increased, the head should be cooled. This may be done by the use of *cold water*, *ice* or *snow*. Here we wish to warn parents and nurses against the errors so often committed, in making these cold applications to the *head*. We will notice but two ; first, that of only partially enveloping the head, by placing a small wet cloth perhaps over the forehead only, believing this to be the

literal meaning of the term "cold application," whereas the cloth should be of several thicknesses, and placed not only upon the forehead, but over the whole head, as necessity may demand, and particularly the back part. We have often been astonished to find that so simple and efficient an application, could be so superficially made. The second error is, that of allowing the cloths to remain until thoroughly heated before being changed, thus permitting a reaction to take place, and rendering the cold applications an evil rather than a benefit.

We once heard an experienced physician remark: "He knew of *no good* resulting from cold applications to the head, for" said he "if a reaction take place, the heat will be increased." There is truth in the observation, but our experience has satisfied us, that a *proper* application of cold to the head, when thus inflamed, is of the *greatest* benefit, great as the difference between success and failure.

We have treated and cured several cases of incipient dropsy in the head; there *is* an *incurable stage* of the disease, yet we have successfully treated some cases, when we had evidence of water being upon the brain. Our method has consisted chiefly of *cold* applications to the *head*, and *hot* to other parts of the body; in very severe cases we have enveloped the *whole head in snow* or pounded ice, and at the same time the body and limbs in hot wet sheets.

A case in point: The child of Mr. F., that had been sick for several weeks with cholera infantum and inflammation of the brain, attended by one of our most popular physicians, and treated secundum artem, until he abandoned the case declaring that it could not recover, was at this juncture placed under our care. The little patient was in extreme distress, eyes bloodshot and sunk deep in the sockets, head continually rolling, while uttering the most piteous moans. The hands and feet, and indeed the limbs to

the elbows and knees, were cold and purple, and the case appeared utterly hopeless when we commenced treatment. We immediately ordered the head to be enveloped in pounded ice, and every other part of the body at the same time in hot wet sheets. The effect was like magic; the child that had screamed and groaned constantly for the past eight and forty hours, soon became soothed, and in one hour was sleeping quietly. The applications were continued some time, until the circulation was fully restored to the extremities, when they were gradually dispensed with, and the patient, although reduced to the lowest possible point of life, began to recover from that hour, and was ultimately restored to good health.

HYDROTHORAX.

Dropsy in the Chest.

The cavity of the chest as well as of the abdomen is liable to dropsical effusions, and the same causes which are in operation for producing the one disease will also cause the other. Pleuritic inflammations often result in dropsy of the chest. This is a more difficult affection to cure than that of ascites, or general dropsy. It so speedily disturbs the vital functions that death will sometimes ensue at an early period of the disease. Some few cases of this we have treated successfully with water.

Symptoms.—The peculiar symptoms which mark this disease are hurried and laborious respiration, dry hard cough, a quick wiry pulse, and usually other parts of the body bloat and show signs of dropsy.

Treatment.—This should be very similar to that prescribed for the other kinds. Secure free perspiration by the hot fomentations or hip baths, as the

patient may be able to bear them. The medicines used for the other forms of dropsy are equally applicable in this. It is a dangerous disease and should be treated promptly and with skill. We counsel those afflicted in this way to obtain the advice of an experienced physician if possible. The use of the spring waters of Saratoga has been attended with success in cases of dropsy, as well as in other diseases.

CHAPTER XXV.

Eleventh Group.

NERVOUS DISEASES.

Debility, Spinal Diseases, Epilepsy, Palsy, Apoplexy, Spasms, Neuralgia, Tic Douloureux.

This group embraces some of the most perplexing and distressing affections which afflict the human race. Physicians often find it exceedingly difficult to ascertain the *nature* of the maladies, and are still more perplexed in deciding upon suitable and efficient remedies. But the poor invalid, suffering from *some forms* of nervous disease, excites our deepest pity and sympathy. The pain is often intense and excruciating, and yet to the beholder there is only the appearance of robust health, except in the woe-begone countenance, which more frequently excites the smile of ridicule, than the feeling of sympathy. In this deep suffering the invalid craves a sympathy from others which he seldom obtains, and for the want of it the mind itself grows gloomy, desponding, and sometimes morose, dwelling upon its own sufferings so much, that frequently neither worldly prosperity, nor the hopes and consolations of religion will serve to give any comfort.

Physicians, knowing the impotency of medicines in these cases, shrink from taking any responsibility, and the friends of the invalid, when entreated for aid or sympathy, will often answer: "Oh! you are nervous, fidgety, have the hypo," or some similar

expressions. No class of invalids is so liable to imposition from the boastful pretender. For the time being they usually give their entire confidence to their medical adviser, and follow prescriptions to the letter. But, failing to obtain relief, they often change suddenly, and frequently every physician within their reach, will be consulted in regard to their maladies. We have in this group of diseases an exemplification of the "glorious uncertainty of medicines." But not to dwell upon these failures, we will endeavor to show to the invalid a better way.

Although there is an intimate relation between some of the members of this group, yet, we will take the most prominent, and endeavor to give the cause, symptoms, and treatment, in a specific manner.

NERVOUS DEBILITY.

In this we have simply a weakness of the nervous system, not usually attended with pain, or any severe mental suffering. The invalid, from an inability to do or bear what he may desire, becomes dejected, and in extreme cases, we sometimes find the most sad and forlorn mental wretchedness.

CAUSES.—It would be impossible, in any given case, to enumerate the causes, either remote or proximate, which operate upon individuals, producing these various forms of disease. Suffice it to say, that whatever tends to impair the integrity of the nervous action, will also tend to bring on a nervous disease; and among the first is debility. Among the causes most conspicuous, are mental excitements in efforts of money making, and following fashions, irregular habits, hereditary disease, intense study, watching, anxiety, care, over exertion, and perhaps above all, the habit of dosing the system with physic.

TREATMENT.—So far as is possible, all exciting and irritating causes should be removed, and the patient placed in circumstances of quiet and freedom from care. The invalid should know his own case and seek proper and rational means of cure. In vain is all medication until the patient is placed in circumstances favorable to restoration. When these things are secured we are in the direct road to health. Then we may enlarge and multiply our means of cure with a fair prospect of being abundantly rewarded, and we would say, no means offer a better hope of success than are found in the water cure appliances. The wet sheet pack, the hip baths, dripping sheets, salt friction, and fomentations, are all useful and may be made very efficacious. In this form we have only a general debility, and the remedies should be applied on general principles, adapting them to each individual case.

SPINAL DISEASE.

As the spine in its connection with the brain is a great nervous center, so any injury or disease in this part is seriously felt through every part of the system. Many strange and complicated difficulties are associated with disease of the spine, but among the most common are the irritated, inflamed and curved spine. In the first two we have usually sensitiveness, pain, and great prostration. In the curved spine we may find pain and irritability, or we may find a great curvature without pain or tenderness.

TREATMENT.—No remedy has acquired such a reputation for efficiency in curing spinal diseases as *water*. Some of the most inveterate and irritable, inflamed, and even curved spines, have been restored. The mode of application does not differ materially from the treatment of other forms of chronic dis-

ease. The wet sheet packing, once in one or two days, followed by the tepid dripping sheet or sponge bath, hip baths cold and hot, and compresses are the usual remedies. The douche or pouring bath is required in some cases to complete a cure. The salt friction once a day, and rubbing with the dry hand is serviceable. The compresses should be made to cover the spine and so fitted and protected as to prevent a chill. These should be worn at night, and in severe cases night and day. Exercise should generally be moderate, systematic, and taken in the open air, and as progress is made in the cure it should be increased. The diet should be well selected, nutritious, but unstimulating. In some cases of curved spine the magnetic battery is a great aid in removing the curvature. An experienced hand should apply it. Physicians depend mostly upon mechanical apparatus for removing curvatures, but we think water and electricity will be found more efficient remedies.

EPILEPSY,

Or Falling Sickness.

This is a disease of the nerves, and is evidently occasioned by some irritation, either upon the nerves of organic life, spinal cord, or brain.

Symptoms.—The patient is seized with a sudden spasm which immediately suspends consciousness and he falls. In this condition he remains a short time with very little sign of animation, when quick convulsive spasms, and irregular labored breathing give signs of returning life. After a little time the spasms cease, the system becomes quiet, and the patient seems in a sleep or lethargy, from which it is difficult to arouse him. From this he gradually recovers his usual condition. There may be one of

these paroxysms, or a succession of them within one or two days, until the patient is entirely prostrated. These fits are truly terrible and distressing, but seldom destroy life immediately. They will often occur at irregular periods, and continue to harass the patient and his friends for many years, and seriously weaken his intellect and business capacity.

TREATMENT.—When once these paroxysms are established, it is a very difficult disease to manage. The nervous system acquires certain habits, which seem obstinate, and all medical agents are comparatively useless. Yet some cases are cured and others greatly benefited. The water treatment we believe has been more successful than any other, both as a means of cure and palliation. A general course of treatment is to be pursued, requiring all the agencies which are found in a well conducted water cure establishment. We will not go into detail as these would necessarily be varied in individual cases.

To treat these paroxysms or fits as they occur, the first thing should be to place the patient in a favorable position, with plenty of air and the clothing loose. The feet should be placed in hot water with the hot fomentations over the region of the stomach, and a cold cloth upon the head. These are the most available means for a quick restoration. After this, to prevent a second attack, make thorough work with the hot fomentations, at the same time keeping very cold applications upon the head, and especially upon the back part and base of the brain. This course will frequently prevent a recurrence and speedily restore the patient to his usual health.

In some instances we envelop the lower limbs entirely in hot sheets, securing a free circulation to the extremities. Much more might be said in relation to the treatment of this singular and important disease; but as it would require the counsel and

advice of an experienced physician to give full and explicit directions, we think all has been said here that would be practical.

PALSY.

This disease of the nervous system is usually preceded by some acute attack, in which the nerves have received a severe shock, such as apoplexy or congestion of the spine, by which sensation or motion, and in some cases both, are partially or entirely lost. There are several varieties of palsy, but it is not necessary to give the peculiarities of these, as the treatment must be varied, even in the same kinds to suit the different cases.

SYMPTOMS.—These are loss of sensation or motion, perhaps both. Sometimes there is numbness in the parts, and a prickling sensation.

TREATMENT.—Many cases have been restored by the water treatment. As soon after the attack as possible, commence a thorough course of friction and bathing. The hot hip bath and tepid dripping sheet once or twice a day, for ten or twenty minutes; or the wet sheet pack and dripping sheet, are the remedies for domestic practice. These must be always followed by thorough friction. The fomentations may also be used with decided benefit. These cases should receive early and efficient attention; as after a few months the disease becomes more difficult to cure. When there is much coldness and deadness in the extremities or on the surface, a stimulating wash of cayenne, mustard and vinegar, steeped together, and applied hot, will often arouse the action of the skin. Should no action be aroused by this wash, use afterwards the hot fomentations over the parts stimulated. This will usually restore action. If the case be of long standing, it may re-

quire more efficient means than can be had in domestic practice.

APOPLEXY.

This is a disease of the nerves, the proximate cause of which is often found in some excitement; and congestion of the brain, and sometimes of the heart, follows.

SYMPTOMS.—The patient usually falls and becomes unconscious; the breathing is laborious, often sickness and distress at the stomach; extremities cold, while the head is hot and face flushed; the circulation being in a great measure suspended. The shock may be light or severe.

TREATMENT.—Place the body in an upright position, with the feet in hot water, and cold water or ice over the head. The hot fomentations over the region of the stomach are of great service. Should this be speedily done, the recovery may be hoped for soon. Delays are dangerous in this disease. Mustard poultices may be allowed to the feet, or mustard added to the foot bath to facilitate restoration. If the patient be partly conscious, and can drink hot water, it will be of service, even if it excite vomiting. This may be desirable, and to produce vomiting add pulverized mustard to the water, and let the patient drink freely.

TRANCES.

These are anomalous difficulties, for which we can scarcely make any specific medical prescription. Persons who are subject to these affections, should pay particular attention to the laws of life and health. In case of a trance, the hot fomentations or cold dash might be useful in securing restoration.

FAINTING.

TREATMENT.—This should be treated, when necessary, in a similar manner to apoplexy, by hot foot baths, and cold applications to the head.

SPASMS.

TREATMENT.—Hot fomentations should be placed over the region of the stomach, and cold wet cloths upon the head. The hot hip bath, or full warm bath may be substituted. Warmth and moisture are the proper remedies for all spasms and convulsions, applied to the extremities and over the region of the stomach, while the head should be covered with cold wet cloths.

LOCKJAW.

In cases of injury of some important nerves, the whole system seems to become spasmodic, and occasionally one general spasm bids defiance to all efforts to move the muscles, and especially the muscles of the jaws. This is a most distressing condition and often terminates fatally.

TREATMENT.—The same treatment should be adopted as prescribed for spasms in general. Apply the hot fomentations to every part of the body, which is rigid until relaxation take place. This has been done with success in cases abandoned as hopeless.

NEURALGIA AND TIC DOULOUREUX.

This is the most painful of the nervous affections. When the pain is in various parts of the body, it is called neuralgia, and when confined to the face, tic douloureux.

SYMPTOMS.—Sharp lancinating pain in the parts affected, usually without redness or swelling. They often occur suddenly and as suddenly leave, without any serious derangement of the general health.

CAUSES.—Some acrid matter in the system, or foreign substance pressing upon the nerves, will cause neuralgia. Various diseases in different parts of the body frequently produce severe neuralgic pains in parts remote from the disease. For instance disease of the heart will give a pain in the left arm; stricture in the urethra, pain in the feet; difficulties in the kidneys may cause pain in the thigh; indigestion will often occasion neuralgia in the head. The use of tobacco is said to produce pain in the heel, &c.

TREATMENT.—When the pain is the effect of irritation, congestion, or inflammation, it may be removed quite readily by the water treatment. Many cases have been treated with entire success, even when they were of long standing; but when they arise from pressure upon the nerves, either by foreign substances which have been introduced into the body by accident, or some malformation by growth, we do not promise a cure. Unhappily we can not always tell, at first, precisely the nature of the case. It will be seen that these cases require and suggest a great variety of treatment. In the face or ear ache, the hot cloths applied to the parts will usually give relief. Sometimes, however, it is desirable to apply the fomentations over the region of the stomach, and give a hot foot bath at the same time. These may be continued until free perspiration be produced. In this state the patient may retire and remain an hour or more, when the tepid dripping sheet or sponge bath should be given him. If there be erysipelas or scrofula in the system as the exciting cause, which is often the case, use the means recommended for those complaints. For sciatica, the

hip bath should be used once or twice a day at 85° F., for from fifteen to thirty minutes, or the hot fomentations may be applied over the parts, if the patient be unable to sit up. The hot douche upon the parts affected, is one of the best remedies for sciatica or lumbago. It requires some apparatus to get a good hot douche. The water should be from 110° to 115° F., and continued from twenty to thirty minutes. The patient should immediately retire, and continue in a perspiration for an hour or more, then use the dripping sheet. This is a great remedy also, for neuralgia, occasioned by rheumatism and gout. The electro-chemical bath has in some cases of neuralgia performed extraordinary cures. Electricity applied properly is of great utility. Persons who are seriously troubled with neuralgia, should spend a few weeks at some good hydropathic institution. All the different appliances found in an institution are often required to accomplish a cure.

CHAPTER XXVI.

Twelfth Group.

DISEASES OF THE HEAD.

Congestion of the Brain, Inflammation, Headache, Sick or Nervous Headache, Inflammation of the Eyes, of the Ears, Stoppage of the Tear Ducts, Styes, Amaurosis.

In this group we have serious forms of disease, some of which often prove suddenly fatal. Through the medium of the brain are the manifestations of life. A serious disease here at once endangers all the operations of vitality. We should well understand the diseases of these important organs of animal life, for, upon the healthy action of these organs depend, in a great measure, all the pleasures of our earthly existence, and all the hopes we may have of our future well being. Therefore, we should study carefully into the laws that regulate their action, which the Great Creator has made us capable of understanding, appreciating, and obeying.

CONGESTION OF THE HEAD.

In a healthy state the head receives at least one sixth part of all the blood of the human body. This blood is absolutely necessary for the development of the brain and the proper action of the mind. The healthy action of the mind is the ultimatum or the sole object for which the body is made, and for the use of which, all the functions of life are kept in being. The brain proper fills the whole cavity of the head, and through it we have manifested the most won-

derful and complex phenomena of human existence. The joys and sorrows, hopes and fears, hatred and love, and all the labors which are prompted by the cravings of the appetite, and the demands of passion, spring from, and depend upon the action of the brain. By this action, and by other influences, the brain is liable to be overtaxed and become diseased; and one of the most common diseases is that of congestion.

CAUSES.—Mental excitement, long and continued applications to business or study, strong mental or moral emotions, influences acting upon the body by atmospheric vicissitudes; also constipation of the bowels, too long retention of the natural secretions, &c.

SYMPTOMS.—A sense of fullness of the head, vertigo, ringing in the ears, headache, stupor and heat. These symptoms may be a transient feeling, passing speedily away as the exciting causes are removed, or they may become permanent, being a source of great pain and weakness, and embittering all the labors of life, and often rendering even life itself a burden.

TREATMENT.—The ignorance which is exhibited in the treatment of these forms of disease is truly lamentable. Even physicians often prescribe and practice that which sound reason and good sense must at once repudiate as inconsistent with the known functions of the brain and with the laws of life, among which are bleeding, either topical as by cupping and leeching, or general, from the arm; also blistering, giving opiates and drastic cathartics, all of which are frequently practiced with no other result, than either to directly injure or give a temporary relief, at the risk of the future health and happiness of the invalid. We should discard at once all this kind of treatment, and turn our attention principally to the exciting causes, and see that these are removed. Then, by the judicious application of

water, and a properly selected diet and exercise, we should expect to so change the circulation as to give not only *temporary* but *permanent* relief. We speak confidently in regard to this disease, having treated many severe cases with entire success. The hip and foot baths are of great service. These should be used two or three times a day, either hot, cool or cold, as the case may demand. Should the feet be habitually cold, the foot bath may be used first hot for about two minutes, and then cold for half a minute, changing three or four times and keeping a cold application upon the head. The diet should be nourishing, but not exciting. Beans and peas are proper articles. Systematic exercise, and especially of the lower limbs, as we practice in our gymnastic course, is of great utility; walking and riding are also good. When the congestion is so great as to produce a tendency to apoplexy, it must be treated as directed under that head.

INFLAMMATION OF THE BRAIN.

When congestion remains for any great length of time inflammation will follow. This inflammation is confined mostly to the membranes.

CAUSES.—In addition to those agents which cause congestion, we will add that of external injuries as producing inflammations. Any agent or influence which would produce congestion, would also produce inflammation, if continued.

SYMPTOMS.—In addition to the symptoms of congestion we have those of severe pain, great heat, great mental excitement, derangement, wildness in the expression, wakefulness, great mental depression.

TREATMENT.—Great promptness and efficiency are requisite. The patient should at once be placed in a quiet condition, and all exciting causes removed. Neither company nor much conversation must be

allowed. The hot foot bath for twenty or thirty minutes should commence the treatment, and at the same time snow or pounded ice, or the coldest water placed upon the head, and particularly over the parts suffering most from heat. These cold applications must be carefully watched, and renewed before the cloths become warm, as it is absolutely necessary to produce the sedative effect of cold. If the cold be properly applied to the head, and at the same time the foot bath continued as directed, we should expect to see the inflammatory symptoms subside. It may be necessary to continue heat to the feet and legs, and cold to the head for sometime, even hours or days. To effect this, the legs may be wrapped in hot flannel, linen, or cotton sheets, either wet or dry properly folded, and if wet, covered with dry flannels to draw the action as much as possible from the head. In this way we have succeeded, in a few hours, in giving relief to some cases which were considered hopeless. This course is at once rational and practical, and the results which have been so often realized should give the greatest encouragement to those who have friends suffering from this fearful disease. Scarlet and Typhus fever patients are often attacked with inflammation of the brain. In such cases this treatment is perfectly applicable, and should be adopted. Some will ask, "how long shall we continue this course?" We answer, until relief is obtained. We have continued it for days, and with the most happy results. The case of a boy some eight years of age will illustrate the benefits of perseverance. He had been sick for several days, under the care of a physician, who was constant in his attendance. The disease changed to the brain and then the physician considered the case hopeless. At the request of the parents we were invited by the physician to see if we could do anything for the suffering boy. We recommended the prescription of snow to

the head, and hot cloths to the stomach and lower limbs. This was in the evening; the next morning, on calling to see the patient, we found the parents had abandoned the application, and were waiting and watching for death to ensue. We gently reproved them for their want of perseverance in the use of a remedy which they were assured could do no harm, even if it should fail after a thorough trial. Upon examination we found the child, though very sick, no worse than on the previous evening; the applications had served, in a measure, to check the disease. They desired to know how long they should persevere. We replied, at least twenty-four hours, unless death should intervene. Stimulated by some words of encouragement, they went vigorously to work, and as a reward for their labors, the child awoke from his lethargy next morning and called for something to eat, and there was no further trouble in the case. We say then, persevere in your applications, being governed by good common sense, get the circulation equal, cooling some parts and warming others, and in almost every case your labors will be crowned with success.

HEADACHE.

This is a very common disease, and in most cases, not regarded as serious. Still, it is a very troublesome companion, and destroys many of the pleasures of life.

Causes.—It is often produced by derangement of the stomach. We have known little misses and young ladies, who were troubled with constant pain in the head, and yet, in the habit of drinking tea, and strong coffee, eating fine flour bread, hot rolls and butter, and sweatmeats (thus keeping the stomach in an acid state), taking but little or no exercise, and dressing so as to produce a constant pressure upon

the internal organs of the body; all resulting in habitual constipation, or, alternating with diarrhœa.

TREATMENT.—Change these habits; let the invalid drink pure water either cold or hot, as the system may demand; generally, our meals will digest better if solid food be taken with but little fluid; the drink should be between meals. New bread, hot cakes, and sweatmeats should be mostly discarded, and the diet consist of good stale bread, lean meat, and a proper proportion of fruits and vegetables.

The foot and hip baths are of great value. They should be taken once or twice a day, of a mild temperature.

The dripping sheet, or sponge bath should be used in the morning with plenty of friction.

Exercise should be taken in the open air daily, and systematic training in the gymnasium is also of great service. The bowels should be kept open by a well selected diet, or, by using enemas when they are needed.

SICK OR NERVOUS HEADACHE.

This disease differs from common headache, by assuming a periodical type. The paroxysms are usually irregular, appearing at intervals of three or four weeks, as the case may be.

CAUSES.—The same condition of the system which will produce a common headache, may cause this. Also, intense mental application, watching, and the excitement and fatigue of business, will cause it. In some cases it is, doubtless, hereditary.

TREATMENT.—When the paroxysms are periodical, a thorough change should be made in the mode of life. Severe cases have been entirely relieved by adopting a vegetable diet, and using a thorough sponge bath in the morning on first rising. When the stomach is acid, it should be carefully watched

and kept sweet by proper diet. Animal food may be desirable for a short time. The alkalies, salaratus and soda, in small quantities, will give temporary relief, but prove an evil if continued. A course of water treatment will materially aid in effecting a change in the physical habits. The hip baths and the wet sheet pack, taken daily are of great benefit. At the time of a periodical attack, the aggravating symptoms may be very much mitigated by the use of hot fomentations over the liver and stomach, with cold cloths upon the head, and, by drinking freely of hot water even until thorough vomiting is produced.

INFLAMMATION OF THE EYE.

This is regarded in some cases as a contagious or highly infectious disease, and is frequently transmitted from one individual to another. Especially is this true of the disease known as the Egyptian opthalmia, which has prevailed extensively in some portions of the civilized world. It is supposed to have had its origin in Egypt. There are many difficulties to which the eyes are subject, but the most common is inflammation. This often continues until the sight is entirely lost. To understand the treatment of the eye and ear, is regarded as an important attainment in medical practice. The sight of many eyes have been ruined by improper management. We are therefore well aware of the importance of the prescriptions we make.

Causes.—Inflammation of the eye may be produced by infectious virus, colds, wounds, foreign substances, scrofula, erysipelas, or other humors of the blood.

Symptoms.—Burning sensation about the eye balls and lids, a feeling like sand in the eye, intolerance of light, blood shot, lids swollen, pain and general

fever. In a short time a glutinous mucus is secreted which causes the lids to adhere closely. This may continue a few days, or it may last for months or years, depending upon the state of the system and the treatment.

TREATMENT.—No disease will manifest the good effects of right treatment sooner than this. We call the eye a tender organ; but the treatment it has received from physicians in the way of stimulants, irritants, and caustics, besides the blistering, leeching, and cupping, which are more constitutional, shew that the eye is not easily destroyed. Yet this course of treatment has usually proved a failure. It evidently requires a *different* course.

After having ascertained the nature or cause of the disease, we shall then be prepared to adopt rational means of cure. If it be caused by infectious virus, remove this as speedily as possible from the system, and from the eye, by the general water treatment, and bathe the eye in hot water, using a fine linen cloth three or four times a day, for ten or fifteen minutes at a time. Should cold be the exciting cause, then pursue the course directed for colds, making the topical applications to the eye, as before directed. If foreign substances be in the eye, let them be removed, and, to allay the irritation, apply the hot cloths. Should there be humors in the blood, the treatment may be as directed under the head of scrofula or erysipelas, remembering to thoroughly cleanse the eye several times a day with water either cool or hot. If much swelling of the lids, a slippery elm poultice, or alum curd may be applied at night. Foot and hip baths should be used two or three times a day, for fifteen or twenty minutes, varying the temperature to meet the demands of the case. The wet sheet packing, and the vapor baths, followed by the tepid dripping sheet, are valuable remedies. In acute attacks the diet

and exercise should be regulated after the general principles of acute disease. In chronic cases, the system must be cleansed with the water treatment, and then strengthened by good nourishing food. In case of granulation of the lids, a small quantity of the tincture of iodine may be made to the lid externally once a day. This will remove it. Most people suppose that *cold* water should be applied to an inflamed eye; but this is a great mistake. We advise those who are troubled in this way to make a fair trial of this remedy, and we believe they will be fully satisfied with the results. It is a remedy ever at hand, and will save much perplexity and expense.

INFLAMMATION OF THE EAR.

The ear is a much more complicated organ than the eye, but it is not as liable to become diseased. The ear, however, is subject to many serious difficulties which require medical attention. Among these are inflammation and deafness. As inflammation usually precedes deafness, we shall confine our remarks principally to the treatment of the former.

CAUSES.—Colds, injuries, and various acute diseases, such as scarlet fever and measles.

SYMPTOMS.—Usually, severe pain in the ear, called earache. If continued, there will sometimes be a discharge of offensive matter, and the sufferer becomes more or less deaf.

TREATMENT.—When colds and influenzas produce the disease, a general course of treatment, such as is recommended for those affections is proper. The hot fomentations may be applied externally to the ear, until the pain is relieved. Should the inflammation be the result of acute disease, a general course of hip baths and wet sheet packing pursued

for a few days or weeks, as the case may be, will suffice to cure in the early stages.

When the eustachian tube becomes inflamed, the inhaling of vapor, by sitting with the head over a basin of hot water, and making the vapor as warm as can well be borne, is efficacious. In case this membrane becomes thickened, as is frequent, producing deafness, add a few drops of the tincture of iodine to the water. Fill the mouth with the vapor, then close the mouth and nose, and swallow. This will force the vapor into the tube and give relief.

CLOSING OF THE TEAR DUCTS.

This annoyance is usually the result of inflammation, and caused by thick mucus passing into the duct and adhering, so filling it. The secretions of the eye having no outlet, are continually overflowing the lid. These may frequently be opened in the first stages by using hot water to the eye. In later stages a slight current of electricity will sometimes open the duct. Place the feet in hot water, with the negative pole of the battery, then apply the positive pole through the finger of the operator. If this does not give relief, a silver tube may be introduced by a surgeon

STYE.

This is found on the free edges of the eye lids, and resembles a small boil. It is caused by a want of action in the parts.

TREATMENT.—The application of water, either by the eye douche or the hot cloths, several times a day, is a good remedy. This should be followed for a few weeks until the lids become healthy. A slight touch with the tincture of iodine, will remove it when forming.

AMAUROSIS.

This is a disease of the optic nerve, caused by a general debility of the system, injuries, or exposure of the eye to too strong light. Intense mental emotions or study will also produce it. It is a very stubborn disease, and usually regarded as incurable. The sight is lost without any *apparent* change in the eye.

TREATMENT.—Remove as far as possible all influences tending to debilitate the nervous system, and pursue a general course of tonic water treatment and electricity. We have succeeded in restoring several cases of partial blindness by the use of these remedies. A general course of hip baths, wet sheet packing, and dripping sheets, must be pursued.

The magnetic battery should be applied daily, for ten or fifteen minutes with a light current.

CHAPTER XXVII.

Thirteenth Group.

DISEASES OF THE MIND.

Insanity, Melancholy, Hypochondria, Hysteria.

The union between mind and body is so intimate that it is sometimes very difficult to ascertain definitely which of these is originally diseased. Probably more serious mistakes are made in undertaking to prescribe for the one, while the other is at fault, than in any other department of medical practice. When the mind is diseased it is folly to dose the body with physic, in the hope of curing the disease of the mind. When a diseased *body* is the cause of mental suffering, the remedies should be applied to *that*. It becomes us well to know how one part of this complicated piece of mechanism affects another. There may be a "mind diseased;" the passions, appetites, and emotions, are not always in a healthy state, and they often bring the body into bondage worse than any bonds of human forging. They frequently drive their victims to madness. To *prevent* this is a much easier task than to *cure*. But, as there *is* madness in the world, we should be prepared to treat it on *rational* principles. To minister to a mind diseased on the principles of mental science, and to adapt rational means to secure a rational result, requires more acumen than physicians are in the habit of exercising. When we collect all the insane together, even in one small state, we find that they are numbered by hundreds. These are *acknowledged* to be insane and sent to the asylums because

the insanity is of a dangerous type, or they need a special treatment which can not be obtained from physicians among their friends. The number thus acknowledged to be insane is very great, but if we should be able to recognize the subjects of mental aberrations, outside of our insane retreats, we would find the number alarmingly increased. We are aware that some physicians and mental philosophers are in the habit of accounting the majority of mankind insane; be that as it may, so far as the subject is philosophically considered, *we* have only to do with that class whose mental aberrations become so apparent that they require the aid of the physician. All this group of difficulties might be regarded as coming under one general denomination, *insanity*, yet as there is a marked difference in the cases, we shall make these practical distinctions.

INSANITY.

A person, in the common acceptation of the term, is regarded as insane when reason ceases to control his mental or moral actions. In this condition he may commit the most heinous crimes without being held amenable to the laws. Under this plea villains frequently endeavor to hide their sins for the purpose of escaping just punishment. But there is no doubt, however, that individuals have been punished for crimes which should have been pardoned, or, at least, the punishment mitigated. The point of accountability may be very difficult to determine. We ought to deal charitably with all, and where there is evidence of mental hallucination the subject should be treated with clemency; yet, at the same time, we must carefully watch such characters to prevent injury either to themselves or others.

Causes.—Mental excitement too long continued, intense study, free indulgence of the appetite, dis-

appointments, sudden success, grief, continued application to business without proper relaxation, wakefulness, watchings, alcoholic beverages, suppressed eruptions, and suppressed natural evacuations.

SYMPTOMS.—These will vary according to the various causes which produce them. We can not enter into a minute description of the varied manifestations of insanity. When we find an individual whose mind becomes all absorbed on any one subject, and so engaged as to lose his appetite and sleep; and become very restless and nervous, we have reason to fear the consequences. A total loss of reason is generally preceded by great mental excitement, loss of appetite and loss of sleep, the person becomes at times depressed, irritable, inclined to weep, suspicious, dogmatic, incoherent; at other times he may be mirthful, and even gay. Whenever we find these, or similar symptoms, we are admonished of the necessity of medical aid to prevent the entire loss of reason. During the incipient stage, we may have strong hope of arresting the progress of the disease, by proper management, and thus prevent the *entire* loss of reason.

TREATMENT.—In the first place, all exciting causes must be removed, whatever they may be. It is vain to reason with the patient until these are removed. Then we must be careful to obtain and keep his confidence by being frank, truthful and decided. Deception works great evil. If he once loses confidence in your veracity, in vain are all your efforts to benefit him. After removing the exciting causes and securing the confidence of the patient, we shall find a valuable remedy in the water applications. These should be made judiciously. In the first stages great dependence may be placed upon the use of the tepid hip, and hot foot baths (always remembering the cold applications upon the head at the same time), also upon the wet sheet packing and dripping sheet,

and hot fomentations used as directed for inflammation of the brain, in typhus fever, &c. These baths should be repeated and continued as the necessity of the case may require. The hot and cold foot bath, alternated as before described, should be used in the evening. We repeat, the head should be kept cool, even at night, if required. Generally, the whole head, except the face, should be enveloped. The mind should be kept pleasantly occupied, and all the subjects which have previously excited the patient avoided.

If after a fair trial of the remedies prescribed, the patient be unaffected and remain in a state which the treatment will not control, or there be danger either to himself or others, then he should be sent to an asylum, or water cure institution. In these institutions means are furnished for controlling cases which can not be conveniently provided in domestic practice. Some cases which can not be controlled at home by friends, are readily influenced by the treatment they receive in our water cures. Desperate cases should be sent to the asylums. Our advice then to those who have friends in this unfortunate state, is to lose no time in securing the thorough treatment, either of water cure institutions, or that provided in our insane retreats.

MELANCHOLY, OR HYPOCHONDRIA.

In this form of partial insanity the reason is not wholly lost, yet it becomes so perverted that the invalid is frequently in a more pitiable condition than those entirely insane. He is often blamed for those acts for which, at least, he is only slightly responsible, and this censure drives its victim almost to desperation. Under the influence of this melancholy, many foolish and sad acts are committed. When it becomes a fixed state of mind everything

seems to be turned into bitterness and evil. No words of kindness soothe, no prosperity cheers, and no encouragement serves to raise the mind above these clouds of gloom and sorrow. When no ground of fear can be discovered, the melancholy man is ever disposed to imagine some danger near. He is constantly expecting calamities, either in the loss of property, health, or friends, and every trifle is magnified into a real trouble.

CAUSES.—This state of mind is frequently the result of a disturbed and unhealthy condition of the liver and digestive organs. A fit of dyspepsia will often give "the blues," and a continued dyspepsia will cause melancholy. Many other causes, besides disease, often operate to produce this state. The commercial, financial and civil excitement connected with business and politics, drive many victims into mental darkness and gloom. It is unnecessary to particularize. The complex nature of man renders him liable to morbid impressions, which may gather into a permanent state of melancholy.

TREATMENT.—The nature of the disease itself, would seem to suggest the proper course for recuperation. The state of the body, mind, and individual habits, must be carefully considered. When the body has received the necessary attention in regard to diet, bathing and exercise, then it is proper to address ourselves to the *will power* of the individual. He must be made to feel and understand that "things are not always as they seem." Much may be done by a fixed determination. The invalid should be aided in every way consistent with the laws of life and health. Traveling, bathing, and pleasant company, produce important changes, and frequently secure restoration. Specific directions can be given only for individual cases. The general principles of treatment are embraced in the above suggestions. Many severe cases of melancholy, have

been entirely restored by the water treatment. In this disease, as well as in insanity, the invalid will usually receive treatment better adapted to his condition in a water cure institution, than among his own friends. Change of scenery and association are important. In connection with bathing and the wearing of the wet compress over the region of the stomach and liver, much benefit is often received from friction with the dry hand. Let a healthy person rub briskly the invalid for fifteen or twenty minutes each day. Also the drinking of water, either cold or hot, will be found very beneficial. In many cases the fluids of the body become thickened, and do not circulate freely, producing a tough, ropy mucus in the throat, causing irritation and cough. By diluting the fluids of the body, great relief is obtained. If the invalid be cold, pure water should be taken hot, one or two pints once or twice a day, on an empty stomach. As depression of spirits more frequently has its origin in some disease, the remedies will consist in removing the difficulties as directed under the various heads.

Many medicines are advertised as specifics for nervous diseases, and, as the invalid is usually ready to credit every statement, provided he is promised "a sure cure," it may be well to remind him that many of these advertised medicines are either useless or positively injurious. The opiates and narcotics, are at most "treacherous palliatives." Homœopathic medicines, if prepared after the formulas, will be safe. Decoctions prepared from lady slipper (valerian), skullcap, catnip, and similar articles, will not be injurious, and in some cases may prove beneficial. Cures must be effected, however, chiefly by proper regimen, and bathing.

HYSTERIA.

This form of nervous disease is intimately related to hypochrondria, and should be treated after the same general principles. In the second part of this work it will receive more especial attention.

REMARKS.

In closing this chapter, it may be proper to draw the mind of the invalid to that subject which seems to have an intimate relation to the remedies used for removing nervous diseases. As HOPE is a faculty of mind which has great power over our mental and physical being, and is usually wanting in persons afflicted with nervous and mental diseases, it is important that something should be done to stimulate and strengthen this faculty. So much of our happiness depends upon *hope*, that the scriptures say "We are saved by hope;" it becomes us, therefore, to examine well into the foundation and condition, upon which so important an exercise of mind is based, and see if we may not be able, even when outward circumstances appear unfavorable, to secure such a hope as shall be "an anchor to the soul both sure and steadfast," and enable us to triumph and rejoice, even under great tribulation. Many instances have occurred, where individuals, sunk in the depths of despair, have, by the power of hope, been raised to new life, and received strength, by which serious maladies which had preyed upon them for years, have been partially and often entirely removed. Although the exercise of such a hope may be rare, yet we believe it to be entirely within the range of the mental faculties, and that abundant provisions are made for the exercise of *just such a hope*. Such provisions are made in the

gospel of our blessed Lord and Saviour Jesus Christ. In that *gospel* we have the character of man portrayed to us in no flattering light. In his natural condition he is represented as lost, "without God, and without hope, in the world," selfish, sensual, and utterly alienated in his heart and life from that God whom he is under the most solemn obligations to love and serve. The consciousness of this condition, with many individuals, has a depressing influence, and greatly aggravates many of the diseases to which they may be subject. These individuals pursue their enquiries no further than to ascertain the great fact of their mental and moral disease, without apprehending the remedy. In such cases their bondage is deplorable, for they are continually doing those things for which they feel self-condemned, and which they promise themselves sacredly they will not do. These failures weaken the power of the will, and no captive bound hand and foot is more utterly helpless. In this doubting state, many, both in the church and out, remain. They "wait for the moving of the waters," and do not seem to recognize the fact, that "their chains *are broken* and they are free." It is unnecessary for us to take up this subject in a particular manner, as it is abundantly discussed in sermons, and in many religious books, as well as in the Bible, where plain and practical instructions, adapted to every case will be found.

But, its relation to disease, leads us to remark, that, every individual should secure this *hope* which gladdens the heart, and "Doeth good like a medicine." The gospel plan for this is, First, that we accept as true the assertion made in relation to our lost and helpless condition. That we are lost and hopeless in ourselves is abundantly proved, and it is vain to labor or strive to make it appear otherwise. "The whole head is sick, and the whole heart faint." When we fully recognize this, and own the sentence

just which condemns us, then we are prepared to hear the voice of mercy and glad tidings as revealed in that same gospel. "Jesus Christ died for sinners." He is our substitute. "He bore our sins in his own body on the tree." Receiving this mercy as a free gift, we are then no longer under condemnation, but become the children of God, heirs of God, and joint heirs with Jesus Christ to a glorious inheritance. Thus accepting, we are filled with *hope*, and a "hope that maketh not ashamed, because the love of God is shed abroad in our hearts;" and, again, it purifies us, even as he is pure. Then we are prepared to conform ourselves to the character and life of Christ, and lay up our treasures in heaven. Knowing therefore that we have such an inheritance, provided for us without our labor or remuneration, simply as a gift, the purchase of a saviour's death, we may well rejoice, and as the apostle exhorted, "rejoice always." Being filled then with love and joy, peace and hope, it remains for us to comply fully with the conditions of this blessed *hope*, and to press on, "Adding to our faith virtue, and to virtue knowledge, and to knowledge temperance, and to temperance patience, and to patience godliness, and to godliness brotherly kindness, and to brotherly kindness, charity." These graces will prepare us to bear without a murmur the temptations, trials and tribulations of earth. We exhort you therefore, to be of good courage, and to use all proper means in securing the highest state of moral and physical health, and then consecrate your powers to the service of God and to doing good.

CHAPTER XXVIII.

Fourteenth Group.

MISCELLANEOUS DISEASES.

Intemperance, Bites of Serpents, Stings, Hydrophobia, Poisons, Burns and Scalds, Bruises, Cuts, Drowning.

In this group, as is implied, we have a variety of ailments, produced by many different agents, some of which require great skill and tact in the treatment, as all the departments of medical practice are here called into use. The mechanical and surgical, chemical and functional are sometimes all blended in the treatment of an individual case. But we will endeavor to give some appropriate directions for the management of these cases which will be both reasonable and practical.

INTEMPERANCE

This may be regarded as a physical disease, although intimately related to affections of the mind. The stomach of a drunkard is diseased through the influence of the alcoholic poisons, and the brain, which sympathises deeply with the stomach, receives likewise the same morbid influences. The mind, which depends upon the brain for its healthy action, does not receive its proper stimuli, and consequently both body and mind become mere wrecks under the influence of habitual drunkeness.

We will not attempt to describe drunkenness as a disease, since the deplorable ravages are seen everywhere, in high places as well as in low, and its victims are among the most wretched and loathsome of

human beings. The disease is so far of the mind that the act is voluntary, and in consequence the victim loses his own self-respect, as well as the respect and esteem of all good men.

CAUSES.—For the most part the disease is produced by partaking of small quantities of alcoholic beverages, either socially or as a medicine. With the evils resulting from the use of alcoholic drinks, as they are socially allowed, we do not purpose to contend. They are apparent, and many philanthropists and christians are deeply interested in this great reform. It is a great and noble enterprise, and we bid them God speed. But, few persons are aware of the extent of the mischief which results from the use of alcoholic preparations administered as medicines. If the sad effects which have followed the use of Brandy & Co., when prescribed as medicine in *many, many* cases, could be fully portrayed, we think that physicians, who have the good of mankind at heart, would stop and consider before they would venture to offer these waters of death to poor suffering humanity, who look to them for the waters of life. Physicians are so in the habit of making these prescriptions, that in almost every disease of the stomach and bowels, brandy is the remedy. The result is, that in almost every case of indisposition, without waiting for the advice of a physician, the people prescribe for themselves, and *brandy* has become a very popular medicine. Thus, by imbibing it as a medicine, a habit is formed which ends in the horrors of drunkenness. Intemperance has greatly increased during the past few years, and it is clearly traceable to the fact of the increased popularity of these agents as medicines.

TREATMENT.—For the evil as it is exhibited socially, there is but one remedy and the prescription will be found in the "Book of Books," where it is written, "Touch not, taste not, handle not." Enough has

been said to satisfy every mind which is willing to be convinced, that the only safety is in "total abstinence." But how shall the evil be removed, when the result of medical prescriptions? Every man will claim his rights in the use of articles which he believes will be for his good. If brandy be useful as a medicine, and no other agents can be substituted, the argument will be convincing to most minds that it should be used. Many are able to receive it without apparent serious injury, and therefore justify its employment. But, if we follow the secret influences of this destroyer, we would find many victims who *began* the use of spirits as a medicine, and continued it to gratify the depraved taste of the drunkard. Several cases do we know of persons who observed the strictest habits of temperance when they began the use of alcohol as a medicine, which ended in the horrors of daily intoxication. If then any agent can be found which is in any measure a substitute for this insidious poison, *that* should be used, and alcohol employed exclusively in the arts.

We hold that there *is* a substitute, and that it is *entirely unnecessary* to use *brandy as a medicine.* The testimony of very many physicians, both in the hydropathic and homœopathic schools, has demonstrated the problem that other means may be depended upon as remedies, with equal or greater success. Among hydropathic physicians brandy has been *entirely* proscribed. We do not say that it is never used, but we say they do not depend upon it, or recommend it, and whenever it is used, it is simply as a convenience or a palliative till other and better means can be employed. Desperate and severe cases of disease, in which brandy was supposed to be the only remedy, have been brought to a speedy and successful issue without it. If, then, alcohol is not necessary, our course for treating this

disease in the incipient stage is clear. ABSTAIN FROM ALCOHOL.

Should the disease be already established, and we seek a remedy to remove the depraved appetite, nothing has ever been so successful as *water*. This, used as it may be, for bathing and drinking, allays the nervous irritation, cools the fever and assuages that thirst, which is so oppressive to the drunkard. When the patient has some self-control, he will find great assistance in removing the taste for ardent spirits, in a full course of water treatment. Should self-control be lost, our advice would be, a visit to the home for the inebriate, established at Binghamton, N. Y.

BITES OF VENOMOUS SERPENTS.

TREATMENT.—If the wound can be reached by the invalid, the virus should be extracted immediately by sucking the wound until the bleeding ceases. If on parts of the body which he can not reach, a friend should perform the operation. After the virus be thus, as nearly as possible, removed, the application of the spirits of ammonia will be serviceable.

Alcohol has a reputation for being an antidote. The prescription is "drink whiskey until intoxicated." This is said to be *sovereign*. If this be true we should be happy to have whiskey appropriated to that use. We might expect, however, that a person able to bear the effects of the whiskey manufactured in these days, would endure a pretty hard bite from a venomous serpent. Sweating baths have a very beneficial effect in removing the poison after the first process has been passed through. A strong tea of the common plantain has a very high reputation as an antidote.

STINGS.

TREATMENT.—Extract the poison as directed for the bites of serpents at first. Then use the ammonia or common plantain. The juice of the plantain is a specific. Take the fresh leaf, bruise it and apply to the parts. The wet sheet packing, or the vapor bath will serve well to remove the pain and irritation which often lingers for a long time.

BITES OF RABID ANIMALS. (*Hydrophobia.*)

TREATMENT.—No specific has yet been discovered for this fearful disease. The best remedy yet ascertained is the vapor bath. Cures have been reported of cases considered hopeless by a long continued use of this remedy. A strong tea of the scull cap, (scutellaria) has obtained some popularity. It is a safe remedy.

POISONS.

TREATMENT.—There are many substances, both vegetable and mineral, inimical to the human body; but to give a minute description of each one, with its antidote, does not come under the design of this work. However, it is important to take a practical view of this subject, and give such directions as may be applicable in cases of accidental poisoning. When poisons are taken into the stomach, of whatever nature they may be, the copious drinking of water will serve to dilute them, and thus render them less injurious. Thorough vomiting should be produced. Some of the alkalies are destroyed by sweet oil. The acids by alkalies. To induce speedy vomiting, in addition to the water drinking, let the fauces be excited with a feather or the finger, or a drink made

of pulverized mustard, one table spoonful in a quart of hot water. This will produce immediate vomiting. It should be continued until the stomach is well cleansed of the poison. After this is effectually done, constitutional treatment may be needed. In such a case the general water applications are available.

BURNS AND SCALDS.

TREATMENT.—No medical agent is so well adapted to the treatment of these difficulties as water. Many physicians and nurses apply oil, cotton, spirits of turpentine, soap, and similar articles, to remove the pain from burns. A little reflection will satisfy any one that water is the best agent. Many valuable lives are lost every year for want of knowledge of the proper use of water. Very cold water should not be applied; but, the temperature should be at that point, which will allay the smarting and not chill the patient. If this be observed, then, water may be applied in many different ways, and as long as is required to extract the pain or anguish from the burn. If the parts can be immersed, this will be found the most effectual, as the temperature can be maintained at a more equal standard, and lowered or raised as found necessary. But, if the affected part can not be immersed, then apply cloths out of water which will secure the same effect. This course persevered in will be found the most effectual and at the same time save a great amount of suffering; for if the temperature be right, the pain will almost immediately cease. The applications should be continued until there is no return of the pain when the part is removed from the water. Then the wound may be dressed with some simple serate to exclude the air. Deep burns should be treated with great care, and the patient kept quiet. Should

there be general fever, the wet sheet packing in tepid or warm water, will be of great service.

BRUISES AND FALLS.

TREATMENT.—The animal body being of a delicate structure, frequently in coming in contact with more dense bodies, is very severely bruised or maimed. The manner of treatment in such cases has usually been, to bleed, cup or leech, and apply irritating liniments to the parts bruised. This is supposed, by many to be the only way by which the circulation can be restored. But, should we reflect upon the nature of the difficulty, and the means appropriate for a cure, it would seem that every person would at once be convinced that the applications of hot water, would be altogether more rational and practical. Experience demonstrates this. Then, in case of a bruise or fall, if no blood vessels be ruptured the hot bath at 106° F., or the hot fomentations continued until there is free perspiration, will be found most effectual. The fomentations and the drinking of hot water will usually be most convenient, and therefore most available. Apply the fomentations to the parts most bruised, until the circulation becomes natural. Should there be a rupture of a blood vessel the bleeding may be prevented, either by a ligature, or by applying ice or very cold water to the parts. Some powerful astringent, like tanin or caustic, may be needed. Apply at the same time the hot fomentations to other parts of the body. Should the bleeding be profuse, call a surgeon without delay.

When children bruise or hurt their heads by falling, as is frequent, the hot fomentations should be applied over the region of the stomach, and cold applications made to the head. They should not be allowed to sleep until the circulation becomes natural. Congestion and inflammation often follow these

bruises and become serious difficulties. In all cases when the fomentations or any other process is used for producing a free sweating, the head should be kept thoroughly cooled.

CUTS.

The danger from these arises from severing large arteries or veins. In such a case make a pressure upon the artery or vein, or elevate the wound above the head and call a surgeon.

When it is simply a flesh wound, cleanse the parts well by washing in pure water, and bring the edges of the wound together, either by a ligature or adhesive plaster. If skillfully done the wound will heal almost immediately. But, if this fail, the parts will be healed by suppuration. Poultices and salves to protect from the atmosphere may be useful.

DROWNING.

In this we have strangulation and sometimes suspended animation by the water which excludes air from the lungs; the same condition produced by strangulation from any other cause.

TREATMENT.—As the body is usually cold, the first effort should be to restore warmth and respiration. Place the body in a favorable position for breathing, and then apply the hot fomentations over the chest and stomach. Should respiration be entirely lost, after the water is removed from the mouth and stomach, let the patient be placed in an upright posture, and then two persons (one on each side) should rapidly raise and lower the arms. This process tends to inflate the lungs and restore breathing. The whole body should be speedily warmed by the fomentations or a full bath. If respiration be not restored by raising the arms, the lungs should be inflated by

a tube or quill placed in one nostril, while the other and mouth are closed. Blow forcibly into the tube for a moment, then press the air from the chest with the hand. Repeat this until respiration is established. The use of the magnetic battery is of great service for restoration.

ELECTRICITY OR MAGNETISM.

This is now being used extensively as a medical agent by many practitioners. Some are in the habit of using it almost exclusively in every form of disease, while others combine its use with *other* remedies. In the present volume we have made but little reference to this agent, as our object has been to simplify as much as possible the practice of medicine, and still to propose and prescribe *efficient* remedies. We have *done* so and recommended such remedies as have been almost universally successful in our hands. In *acute* diseases we seldom use electricity. Yet it is an agent of acknowledged medical power, and may be advantageously applied, both in acute and chronic *forms* of disease. The *proper* use would seldom interfere, in any case, with the remedies we have prescribed, and we therefore recommend it as a valuable assistant to those who may find it more convenient than the other agents. The specific and particular directions will be found in the books accompanying the machines. The instruments of Dr. S. B. Smith, whose advertisement will be found in this work, we have used and can recommend.

HOMŒOPATHIC REMEDIES.

Some of the water cure practitioners are in the habit of prescribing these remedies in connection with water in almost every case of disease. It is

also well known that a large school of physicians depend upon them in every case. We can not say that these physicians are more or less successful than many others who do not use these remedies; yet we believe, that the medicines, if prepared strictly after the formulas, are safe and will not interfere with the vital operations in removing disease. One important consideration in favor of their use, in these days of medicine taking, is, that they serve as a "mental placebo" like the art of physic, "amusing the patient while nature cures the disease." We can not say this much in favor of all medicine, yet we will ever be happy to give "honor to whom honor is due."

Those, then, who favor homœopathy need not fear any serious results, so long as the remedies are honestly prepared.

Again, they are perfectly safe and will not interfere with the use of water as recommended in this work. We say further, that those who have observed the prescriptions made by homœopathic physicians will readily apprehend the most important agents upon which they generally depend in all acute forms of disease. For fevers, aconite and belladona are generally administered, and when the fever is partly broken bryonia is given. For constipation, nux vomica and plumbi are the chief agents. For diarrhœa, arsenicum, antimony and chamomilia. For vomiting, antimony and arsenicum. For bilious diseases, mercurius, nux and ipecac, and so on, changing somewhat the order of giving, but usually making no great change in the medicines.

CHAPTER XXIX.

RECIPES AND FORMULAS.

Scrofula Syrup.

Take of yellow dock root, one pound; burdock, half pound; Spanish sarsaparilla, half pound; sweet elder bark, one quarter of a pound; wintergreen leaves, two ounces. Put this into one gallon of pure water, simmer it down to two quarts; pour off, and add two or three quarts more of water, and simmer for an hour. Let the liquid settle, and pour together and steep to two quarts. Add four pounds good sugar, scald and skim, and bottle for use.

Dose.—A wine glassfull three or four times a day on an empty stomach.

This is good in all cases of scrofula and impurities of the blood. When there is much erysipelas, drink freely of a tea of sweet elder flowers in addition to the syrup. In cases of rheumatism, where there is enlargement of the joints, take the juice of lemons or citric acid as directed for rheumatism. This syrup may be used for several months, and is as valuable as any other preparation for cleansing the blood. When persons wish to make rapid progress in the cure of scrofula, they should adopt the regimen and bathing as directed under the head of scrofula.

Pulmonary Syrup.

Take one pound wild cherry tree bark; liquorice root, one fourth pound; anise seed, two ounces; blood root, one ounce. Simmer in one gallon of

water for one hour, strain, and add again two quarts of water, and simmer until the strength is extracted. Pour the liquids together, and add six pounds strained honey; scald and skim, and simmer down to three quarts. Add to this a strong tincture of white pine buds or bark, made by putting one pound of buds or bark into one quart Bourbon or barley whiskey. Bottle for use.

Dose.—One tablespoonful three or four times a day, before eating, and before retiring.

This is for coughs, colds, and consumption. When the cough is very severe, add to the above some wood naptha and tincture of tolu; about one ounce of the naptha and two ounces of tolu to the gallon. When the cough is the result of a cold, use the fomentations as directed. If an anodyne is required add to the gallon, or in that proportion, one ounce of the tincture of canabis indicus.

The above syrup will aid as much as any other in relieving coughs, &c.

Phosphate of Lime.

Put four eggs into a quart of good cider vinegar; let them remain for two days, then beat thoroughly, and remove the skins, and add three pounds of scalded honey. Bottle for use.

Dose.—One table spoonful three times a day.

This will be found very useful in tubercular diseases.

Inhalants.

No. 1. Take equal parts of the tincture of white pine buds or bark, made as before directed, and balm of gilead and balsam fir buds, tinctured in the same way. Add to a pint of this tincture, one ounce tincture of the balsam of tolu, one of the sweet spirits of nitre, and one drachm oil of anise.

This is a simple inhalant, of great value when the throat is irritable and the bronchial tubes inflamed. It may be used three or four times a day for ten or twenty minutes each time.

No. 2. When there is ulceration, add to an ounce of the above, thirty or forty drops of creosote, and use it once a day for fifteen or twenty minutes, then use No. 1, as directed above.

No. 3. When there is bleeding, add thirty or forty drops of the oil of fire weed, to one ounce of the above tincture. Inhale this three or four times a day. Take five or six drops of the oil of fire weed, upon sugar, or a teaspoonful of fine salt.

These will usually stop the hemorrhage. These inhalants may be varied, ad libitum, to meet the wants of different invalids. We have found them useful in connection with the water treatment, and the syrup, for lung and throat troubles. For further directions see treatment for consumption.

Dandelion Pills.

Take podophylin, one part; leptandrin (blackroot) two parts; extract dandelion, ten parts; oil anise, sufficient quantity to pill. Make this into two grain pills, having one-sixth of a grain of podophylin in each.

These are useful for torpid livers, and in bilious affections of different kinds.

Dose.—From one to three pills on retiring. For constipation, one pill taken at night, will often in a short time remove it.

Cathartics should be used only for specific purposes, and then laid aside. The continued use of drastic medicines injures the system.

For a Cathartic.

Take senna, sage, and ginger, equal parts, pulverized and well mixed. A tea made from a table spoonful of this mixture sweetened, and drank warm on an empty stomach, will easily and speedily cleanse the first passages. If the bowels are very torpid a tea spoonful of epsom salts may be added to the tea. This may be used in any case in which a brisk active cathartic is needed.

Tonic Pills.

Take salicine, piperine, and quinine, of each equal parts. Mix in extract of gentian, so as to have one grain of each in every pill. These are useful as a stimulant and tonic, and from twelve to twenty will break the ague. See page 175.

Relaxing Oil for Contracted Joints and for Asthma.

Take of the red or angle worm and put them into a small quantity of pure olive oil. Slowly fry them in the oil and bottle for use. This can be extracted by putting the worms into a bottle and setting it in the sun. After a few days the oil can be pressed out. Apply it by thoroughly rubbing the parts affected. In asthma take one teaspoonful two or three times a day, and apply externally, over the chest.

Dysentery Powder.

Take of pulverized cranesbill and pleurisy root equal parts. One teaspoonful of this powder in a gill of cold or hot water, sweetened, drank once in from three to six hours will cure almost any case of dysentery or diarrhœa. For general directions see page 201.

For Toothache.

Use the hot foot bath and hold hot water in the mouth and rub the face over the tooth with cold water. Sometimes the hot compress on the face will answer well. When the result of a cold the hot fomentation will usually give relief. If the tooth is decayed consult a dentist.

Syrup for Difficulties of the Kidneys, &c.

Take three pounds stone root (ox balm) and one pound of the bark of sassafras root; simmer together in one gallon of water down to three quarts. Strain; add six pounds strained honey; scald, skim and bottle for use.

Dose—A wine glass full three times a day. Keep in a cool place. This is an excellent syrup in gravel and inflammation of the kidneys and bladder.

Elder Ointment.

Take of the green of elder and simmer it in fresh butter or lard. This may be applied in scald head and salt rheum with decided benefit.

To Alleviate Pain and Burning Sensation in Voiding Water.

Take balsam copaiva one ounce, sweet spirits of nitre one ounce, loaf sugar and pulverized gum arabic each one ounce, peppermint water sufficient to make eight ounces mixture.

Dose.—One table spoonful three times a day before eating.

Closing Remarks.

We have in the midst of a multitude of pressing cases endeavored to redeem our promise in giving prescriptions for a variety of human infirmities; and we now place it in the hands of those to whom we dedicate it, with the fervent desire that it may be useful to them.

The second part of this book will be issued at some future time.

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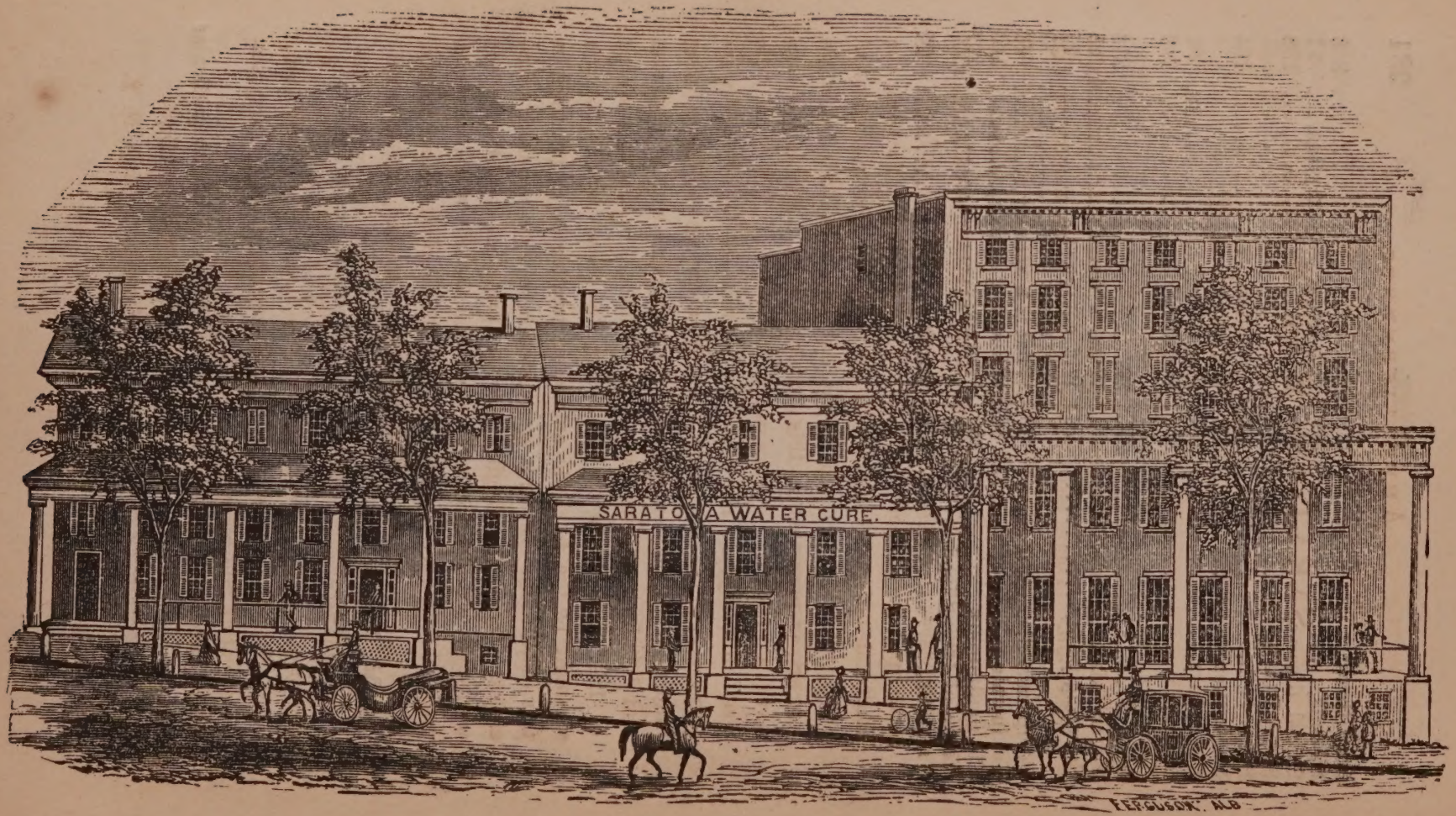
ERRATA.

Page 13, 18 lines from top, for *three* read *their*.
68, 13 " bottom, for *deliquinum* read *deliquium*.
95, 3 " top, for *buffatine* read *buffetine*.
115, 8 " " *thrachietis* read *trachitis*.
142, 21 " " *tendimum* read *tendinum*.

Other errors of less note will be understood without particular notice.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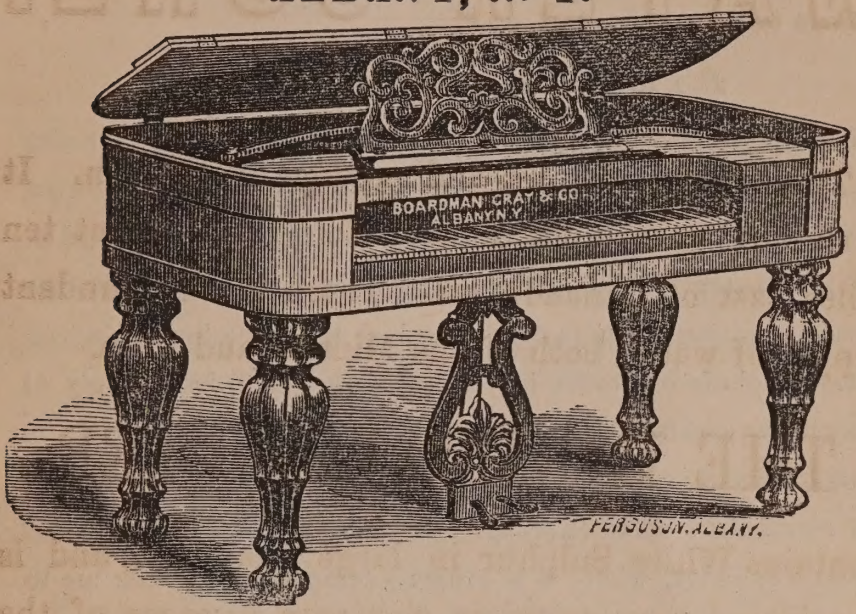

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